LAKE SHORE BANCORP, INC.
Form 10-K
March 28, 2018

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

Commission File No.: 000-51821

Lake Shore Bancorp, Inc.

(Exact Name of Registrant as Specified in Its Charter)

United States	
(State or Other Jurisdiction of Incorporation or Organization)	20-4729288 (I.R.S. Employer Identification No.)

31 East Fourth Street, Dunkirk, NY 14048

(Address of Principal Executive Offices, including zip code)

(716) 366-4070

(Registrant’s telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act: Common Stock, $0.01 par value per share

Name of each exchange on which registered: The NASDAQ Stock Market, LLC

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

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes [ ] No [X]

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

Yes [ ] No [X]

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 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 this 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 definition of “large accelerated filer,” “accelerated filer,” “smaller reporting company” and “emerging growth company” in Rule 12b-2 of the Exchange Act.

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 [X]

The aggregate market value of the voting stock held by non-affiliates of the registrant as of June 30, 2017 was $31,363,347 based on the per share closing price as of June 30, 2017 on the Nasdaq Global Market for the registrant's common stock, which was $15.75.

There were 6,073,970 shares of the registrant's common stock, $.01 par value per share, outstanding at March 28, 2018.

DOCUMENTS INCORPORATED BY REFERENCE:

	Part of 10-K where incorporated
Portions of the registrant's Proxy Statement for the 2018 Annual Meeting of Stockholders	III

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ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED
DECEMBER 31, 2017

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PART I

Item 1. Business.

General

Lake Shore Bancorp, Inc. (“Lake Shore Bancorp,” the “Company,” “us,” or “we”) operates as a mid-tier, federally chartered savings and loan holding company for Lake Shore Savings Bank (“Lake Shore Savings” or the “Bank”). A majority of Lake Shore Bancorp’s issued and outstanding common stock (59.6% as of December 31, 2017) is held by Lake Shore, MHC (the “MHC”), a federally chartered mutual holding company, which serves as the parent company to Lake Shore Bancorp. The remaining shares of common stock are owned by public shareholders and Lake Shore Saving Bank’s Employee Stock Ownership Plan (“ESOP”).   Our common stock is traded on the Nasdaq Global Market under the symbol “LSBK”. Unless the context otherwise requires, all references herein to Lake Shore Bancorp or Lake Shore Savings include Lake Shore Bancorp and Lake Shore Savings on a consolidated basis.

Lake Shore, MHC

Lake Shore, MHC was organized in 2006 as a federally chartered mutual holding company. The MHC does not engage in any substantial business activity other than its investment in a majority of the common stock of Lake Shore Bancorp. The Board of Governors of the Federal Reserve System (the “Federal Reserve Board”) is the regulator for the MHC. Federal law and regulations require that as long as the MHC is in existence, it must own at least a majority of Lake Shore Bancorp’s common stock.

Lake Shore Bancorp, Inc.

Lake Shore Bancorp, Inc. was organized in 2006 for the purpose of acting as the savings and loan holding company for Lake Shore Savings Bank in connection with the Company’s initial public stock offering. The Company, a federal corporation, is regulated by the Federal Reserve Board.

Lake Shore Savings Bank

Lake Shore Savings Bank was chartered as a New York savings and loan association in 1891. In 2006, the Bank converted from a New York-chartered mutual savings and loan association to a federal savings bank charter. The Bank is subject to the supervision and regulation of the Office of the Comptroller of the Currency (“OCC”).

Lake Shore Savings Bank’s principal business consists of attracting retail deposits from the general public in the areas surrounding its branch offices and investing those deposits, together with funds generated from operations, primarily in one- to four-family residential mortgage loans, commercial real estate loans, home equity lines of credit and, to a lesser extent, commercial business loans, consumer loans, and investment securities. Our revenues are principally derived from interest generated from our loans and interest earned on our investment securities. Our primary sources of funds for lending and investments are deposits, borrowings, receipts of principal and interest payments on loans and securities, proceeds from sales of loans or securities, maturities and calls of investment securities and income resulting from operations in prior periods.

Available Information

Lake Shore Bancorp's annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and any amendments to such reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are made available free of charge on our website, www.lakeshoresavings.com, as soon as reasonably practicable after such reports are electronically filed with, or furnished to, the Securities and Exchange Commission. Such reports are also available on the Securities and Exchange Commission's website at www.sec.gov. Information on our website shall not be considered a part of this Form 10-K.

Market Area

Lake Shore Savings Bank is a community bank that offers a variety of banking products to serve the market areas surrounding our eleven branch offices located within the Western New York region of New York State.

Our geographic market area for loans and deposits is principally located within Erie and Chautauqua Counties, within Western New York. As of 2017, there was an approximate combined population of 1,040,000 for Erie and Chautauqua Counties. Our market area is bounded by Lake Erie to the west and Canada to the north, and includes the city of Buffalo, the second largest city in the State of New York by population. The market area includes 13 hospitals, a medical school and a major cancer research and treatment facility, along with a centralized medical campus to cultivate clinical care, research, education and entrepreneurship. The area has nine colleges and universities, five community colleges and various vocational and technical schools. Western New York is home to professional sports franchises and an international airport. The area hosts a broad diversity of industry, commercial establishments and financial institutions as well as a skilled and productive workforce.

New York State currently has several incentive programs for businesses to invest in the Western New York region. One example is the “Start-Up NY” program, which offers tax incentives to start, expand or relocate a qualified business to a tax-free area within the state, primarily near a university or community college campus, in order to access top talent and research facilities. Qualified businesses for this program include advance materials & manufacturing, biotech & life sciences, tech & electronics, and optics & imaging. This program has generated significant interest in Western New York for new business development, due to its proximity to Canada, history of being a strong industrial and manufacturing center, and the number of quality colleges and universities in the area.

The Erie County region and the City of Buffalo have recently experienced economic expansion led by major growth in the health care and education sectors, and resurgence in the central business district, which has led to an influx of private investment in development of hotels and housing in the downtown sector. Major construction projects have been recently completed or are currently underway on the waterfront and at the Buffalo Niagara Medical Campus. The Buffalo Niagara Medical Campus has grown significantly with the construction of a new children’s hospital, expansion of an existing cancer/research hospital and construction of a new medical school by the State University of New York at Buffalo. Development on the waterfront has centered on redevelopment of property for mixed use, including public access and private development that includes office space, ice rinks, hotels and restaurants. The economic development within the region also impacts the small business and middle-market customers that we focus on and we believe we will be able to capitalize on opportunities created by economic growth in this section of our market area.

Our primary market area has historically been stable, with a diversified base of employers and employment sectors. The local economies that we serve are not dependent on one key employer. Transportation equipment is a large manufacturing industry in the Buffalo area, as well as production of automobile component parts. The principal employment sectors are service-related, wholesale and retail trade, and durable-goods manufacturing.

Our future growth will be influenced by the strength of our regional economy, other demographic trends and the competitive environment. We believe that we have developed lending products and marketing strategies to address the credit-related needs of the residents and small businesses in our local market area.

Competition

We face intense competition both in making loans and attracting deposits. Western New York has a significant number of financial institutions, many of which are branches of large money centers and regional and super regional banks which have resulted from the consolidation of the banking industry in New York and

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surrounding states. Some of these competitors have greater resources than we do and may offer services that we do not or cannot provide. For example, we do not offer trust or investment services. Customers who seek "one stop shopping" may be drawn to our competitors who offer such services. We also face significant competition from online service providers who offer financial services, including loan and deposit products.

Our competition for loans comes principally from commercial banks, savings banks, mortgage banking companies, credit unions, online retail mortgage lenders and other financial service companies. The most direct competition for deposits comes from credit unions, commercial banks, savings banks and online banks. We face additional competition for deposits from non-depository competitors such as mutual funds, securities and brokerage firms and insurance companies. We are significantly smaller than many of the financial institution competitors in our market area. Some of our competitors are not subject to the same degree of regulation as that imposed on federal savings banks or federally insured institutions, and these other institutions may be able to price loans and deposits more aggressively. We remain very competitive in Chautauqua County, New York and, as of June 30, 2017 (the latest date such information is available), we had 14.6% of total deposits and ranked fifth out of the nine banks in this market area, according to the Federal Deposit Insurance Corporation ("FDIC") annual deposit market share report. Our deposit market share in Erie County, New York has increased since we entered this market area in 2003. We believe the primary factors in competing for deposits and loans is through personalized service, knowledge of local market area and economy, local decision making, technological convenience via mobile banking and active participation and support of the communities we serve.

Lending Activities

General. Historically, as a thrift institution, we have primarily originated residential mortgage loans, including home equity loans. In recent years, we have become more focused on originating commercial real estate and commercial business loans, also known as C&I Lending, to add adjustable rate loans to our portfolio, manage interest rate risk and to position ourselves for a rising interest rate environment. We retain the majority of loans that we originate. However, we have sold residential mortgage loans into the secondary market, with retention of servicing rights, from time to time in order to manage interest rate risk, and we may do so again in the future, when deemed appropriate. In prior years we have purchased a limited number of equipment loans from a third party broker, which are secured by first liens on the new equipment purchases by small businesses located throughout the Northeastern United States. We have not purchased these types of loans since the first quarter of 2015.

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Loan Portfolio. The following table sets forth the composition of our loan portfolio, by type of loan, in dollar amounts and in percentages at the dates indicated. We did not have any loans held for sale as of these dates.

	At December 31, 2017		2016		2015		2014		2013	
	Amount $	Percent of Total %	Amount $	Percent of Total %	Amount $	Percent of Total %	Amount $	Percent of Total %	Amount $	Pe of %
	(Dollars in thousands)									
Real Estate loans:										
Residential one- to four-family	$ 144,565	39.58%	$ 149,333	45.78%	$ 157,307	53.12%	$ 167,840	59.14%	$ 170,793	61
Home equity	38,078	10.43%	35,534	10.89%	32,770	11.07%	32,337	11.39%	31,675	11
Commercial	122,747	33.61%	107,243	32.87%	83,967	28.35%	68,238	24.04%	58,746	21
Construction	30,851	8.45%	12,361	3.79%	4,849	1.64%	449	0.16%	936	0.3
	336,241	92.07%	304,471	93.33%	278,893	94.18%	268,864	94.73%	262,150	94
Other loans:										
Commercial	27,612	7.56%	20,447	6.27%	15,741	5.31%	13,467	4.74%	12,645	4.5
Consumer	1,355	0.37%	1,313	0.40%	1,507	0.51%	1,495	0.53%	1,517	0.5
	28,967	7.93%	21,760	6.67%	17,248	5.82%	14,962	5.27%	14,162	5.1
Total loans	365,208	100.00%	326,231	100.00%	296,141	100.00%	283,826	100.00%	276,312	10
Net deferred loan costs	3,138		3,016		2,945		2,948		2,846	
Allowance for loan losses	(3,283)		(2,882)		(1,985)		(1,921)		(1,813)	
Loans receivable, net	$ 365,063		$ 326,365		$ 297,101		$ 284,853		$ 277,345	

Loan Maturity. The following table presents the contractual maturity of our loans at December 31, 2017. The table does not include the effect of prepayments or scheduled principal amortization. Loans having no stated repayment schedule or maturity and overdraft loans are reported as being due in one year or less.

	Real Estate				Other Loans		
	Residential, One- to Four-Family	Home Equity	Commercial	Construction	Commercial	Consumer	Total
	(Dollars in thousands)						
Amounts due in:							
One year or less	$ 379	$ 1,106	$ 3,118	$ 4,513	$ 19,613	$ 721	$ 29,450
After one year through five years	2,160	3,538	28,362	280	5,990	461	40,791
Beyond five years	142,026	33,434	91,267	26,058	2,009	173	294,967
Total	$ 144,565	$ 38,078	$ 122,747	$ 30,851	$ 27,612	$ 1,355	$ 365,208
Interest rate terms on amounts due after one year:							
Fixed rate	$ 139,645	$ 1,844	$ 32,506	$ 49	$ 6,221	$ 539	$ 180,804
Adjustable rate	4,541	35,128	87,123	26,289	1,778	95	154,954
Total	$ 144,186	$ 36,972	$ 119,629	$ 26,338	$ 7,999	$ 634	$ 335,758

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The following table presents our loan originations, purchases, sales, and principal repayments for the years indicated.

	For the Year Ended December 31,				
	2017	2016	2015	2014	2013
	(Dollars in thousands)				
Total Loans:					
Balance outstanding at beginning of year	$ 326,231	$ 296,141	$ 283,826	$ 276,312	$ 272,058
Originations:					
Real estate loans:					
Residential, one- to four-family	21,523	19,259	20,485	17,074	28,557
Home equity	15,755	13,663	9,768	9,565	10,913
Commercial	60,529	44,898	29,739	19,774	13,596
Other loans:					
Commercial	20,058	13,135	8,245	3,317	2,518
Consumer	1,154	1,094	1,102	1,243	1,018
Total originations	119,019	92,049	69,339	50,973	56,602
Loan Purchases - Commercial Loans	-	-	242	2,857	1,228
Total Originations and Purchases	119,019	92,049	69,581	53,830	57,830
Deduct:					
Principal repayments:					
Real estate loans	62,142	44,006	39,970	36,118	45,341
Commercial and consumer loans	16,138	12,305	6,253	7,879	5,944
Total principal repayments	78,280	56,311	46,223	43,997	51,285
Transfers to foreclosed real estate	554	369	1,178	448	704
Loan sales - SONYMA(1) & FHLMC(2)	1,069	5,022	9,450	1,737	1,436
Loans charged off	139	257	415	134	151
Total deductions	80,042	61,959	57,266	46,316	53,576
Balance outstanding at end of year	$ 365,208	$ 326,231	$ 296,141	$ 283,826	$ 276,312

(1) State of New York Mortgage Agency.

(2) During 2016, 2015 and 2014, we sold $3.9 million, $8.3 million and $1.5 million, respectively, of long-term fixed rate residential mortgage loans with low yields to the Federal Home Loan Mortgage Corporation (“FHLMC”) in order to offset long-term interest rate risk. There were no loans sold to the FHLMC during 2017.

One- to Four-Family Residential Mortgage Lending. At December 31, 2017, we had one- to four-family residential loans of $144.6 million, or 39.6% of the total loan portfolio. Of one- to four-family residential mortgage loans outstanding on that date, 96.9% were fixed rate loans and 3.1% were adjustable rate loans. At December 31, 2017, approximately 58.3% of our one- to four-family residential mortgage portfolio was secured by property located in Chautauqua County, 35.0% by property located in Erie County and 6.7% by property located elsewhere, primarily in New York State.

Our residential mortgage loan originations are obtained from customers, residents of our local communities or referrals from local real estate agents, brokers, attorneys and builders. Lake Shore Savings historically had retained the majority of residential mortgage loans that it originated. As a result, Lake Shore Savings is exposed to increases in market interest rates, because the yield earned on fixed-rate assets would remain fixed, while the rates paid by Lake Shore Savings for deposits and borrowings may increase, which could result in lower net interest income. In an effort to manage interest rate risk, the Bank may sell long-term fixed rate residential mortgages at origination in the secondary market, with servicing retained, if deemed appropriate.

One- to four-family residential mortgage loan originations are generally for terms of 10, 15, 20 or 30 years, amortized on a monthly basis with interest and principal due either bi-weekly or monthly. One- to four-family residential real estate loans may remain outstanding for significantly shorter periods than their contractual terms as borrowers may refinance or prepay loans at their option without penalty. Conventional one- to four-family residential mortgage loans originated by us customarily contain "due-on-sale" clauses that permit us to accelerate the indebtedness of the loan upon transfer of ownership of the mortgaged property. We do not offer "interest only" mortgage loans, subprime or "negative amortization" mortgage loans.

Our residential lending policies and procedures ensure that the majority of one- to four-family residential mortgage loans generally conform to secondary market guidelines, although we also originate non-conforming loans. We underwrite all conforming loans (i.e. loans with less than a $424,100 loan balance during 2017) using the criteria required by the Federal Home Loan Mortgage Corporation ("FHLMC"). We originate one- to four-family residential mortgage loans with a loan-to-value ratio up to 97%, and up to 101%, which includes a 1% guarantee fee, with our United States Department of Agriculture ("USDA") Rural Development Guaranteed Loan Program ("GLP") mortgage loan product. Mortgages originated with a loan-to-value ratio exceeding 80% normally require private mortgage insurance. Private mortgage insurance is not required on loans with an 80% or less loan-to-value ratio.

We offer adjustable rate mortgage loans with a maximum term of 30 years. When an adjustable rate mortgage is originated, the initial interest rate is established based on market conditions and competitor rates. The rate adjusts annually after one, five, or seven years, depending on the loan product. After the initial fixed rate time period, the interest rate on these loans will re-price based upon a specific U.S. Treasury index plus an additional margin, taking into consideration the cap and floor rates established at the time of loan origination.

Our adjustable rate one- to four-family residential mortgage loans include limits on increases or decreases in the interest rate of the loan. The interest rate may increase or decrease by a maximum percentage amount per adjustment period with a ceiling rate and a floor rate being defined at the time of origination. The retention of adjustable rate one- to four-family residential mortgage loans in our loan portfolio helps reduce exposure to changes in interest rates. However, there are unquantifiable credit risks resulting from potential increased costs to the borrower as a result of the pricing of adjustable rate mortgage loans. During periods of rising interest rates, the risk of default on one- to four-family residential adjustable rate mortgage loans may increase due to the increase of interest cost to the borrower. Furthermore, changes in the interest rates on adjustable rate mortgages may be limited by an initial fixed-rate period or by contractual limits on periodic interest rate adjustments, and as such adjustable rate loans may not adjust as quickly to an increase in interest rates as our interest-bearing liabilities.

After a conforming loan is originated and funded, we may sell the loan to FHLMC. During 2017, we did not sell any loans to FHLMC, but we may do so again in the future, if deemed appropriate in order to manage interest rate risk. We also offer loans through programs offered by the State of New York Mortgage Agency ("SONYMA") which are originated for sale. During 2017, we originated and sold $1.1 million of one- to four-family residential mortgage loans to SONYMA. We retain all servicing rights for one- to four-family residential mortgage loans that we sell.

We also originate loans above the lending limit for conforming loans, which we refer to as "jumbo loans." We originate jumbo loans with fixed-rates and terms of up to 30 years. At December 31, 2017, jumbo loans totaled $8.5 million, or 5.9% of the one- to four-family residential mortgage portfolio.

One- to four-family real estate loans can be affected by economic conditions and the value of the underlying collateral. The majority of our one- to four-family residential loans are backed by property located in Western New

York and are affected by economic conditions in this market area. Western New York’s housing market has consistently demonstrated stability in home prices despite economic conditions, resulting in stable collateral value and lower risk of loss.

Home Equity Loans and Lines of Credit. We currently provide all-in-one home equity lines of credit and have provided home equity loans in the past to our customers. Home equity lines of credit are generally made for owner-occupied homes, and are secured by first or second mortgages on residences. At December 31, 2017, home equity loans and lines of credit totaled $38.1 million, or 10.4% of the total loan portfolio, of which 94.9% were adjustable rate loans and 5.1% were fixed rate loans. The all-in-one home equity line of credit must have a minimum line amount of $5,000 up to a maximum of 90% of the total loan-to-value ratio for qualified borrowers. The all-in-one home equity line of credit products have interest rates tied to the prime rate, generally have a 15 year draw period and a 15 year payback period. Since 2010, our adjustable rate home equity loans include limits on decreases in the interest rate of the loan. The decrease in the interest rate may not be below the “floor” rate established at time of origination. A customer has the option to convert either a portion, or the entire line of credit balance, to a term loan at a fixed rate of interest. As the customer pays down the balance on the term loan, the funds available on the line of credit increase by a like amount. All-in-one home equity lines of credit have 30 year maximum terms.

Home equity loans can be affected by economic conditions and the value of underlying property. Home equity loans may have increased risk of loss if the Company does not hold the first mortgage resulting in the Company being in a secondary position in the event of collateral liquidation. At December 31, 2017, the total of home equity loans and lines of credit where the Company does not hold the first mortgage was $6.0 million. During periods of rising interest rates, the risk of default on home equity loans may increase due to the increase of interest cost to the borrower.

Commercial Real Estate Loans. We originate commercial real estate loans to finance the purchase of real property or to refinance real property, which generally consists of developed real estate, such as office buildings, warehouses, retail properties, self-storage units and multi-family apartment complexes, which are typically held as collateral for the loan. At December 31, 2017, commercial real estate loans totaled $122.7 million, or 33.6% of the total loan portfolio. In underwriting commercial real estate loans, consideration is given to the property’s historic cash flow, paying capacity of the borrower, current and projected occupancy levels, location, and physical condition. Within the commercial real estate portfolio at December 31, 2017, approximately 60.4% consisted of loans that are collateralized by properties located in Erie County, 16.3% consisted of loans collateralized by properties located in Chautauqua County and 23.3% consisted of loans collateralized by properties located elsewhere in New York State.

We originate a variety of fixed and adjustable rate commercial real estate loans generally for terms of five to 10 years and payments based on an amortization schedule of up to 20 to 25 years. Adjustable rate loans are typically based on an index with an added spread based on the type, size and risk of the loan and the rate is typically fixed for the first five years. We typically lend up to a maximum loan-to-value ratio of 50% to 80% depending on the type of property being financed. Commercial real estate loans require a minimum debt service coverage ratio ranging from 1.15 to 1.50 depending on the type of property being financed, a first lien on collateral and the personal guarantees of the owners. Loans are typically subject to prepayment penalties if the loan is paid off before the scheduled maturity within five years of origination.

Commercial real estate lending involves additional risks compared with one- to four-family residential lending, because payments on loans secured by commercial real estate properties are often dependent on the successful operation or management of the properties, the borrower’s ability to make repayments from the cash flow of the borrower’s business or rental income and/or the collateral value of the commercial real estate securing the loan. Repayment of such loans may be subject to adverse conditions in the real estate market or economic conditions to a greater extent than one- to four-family residential mortgage loans. In addition tenancy of the properties needs to be monitored as to lease rates, term of lease and tenant worthiness. Also, commercial real estate loans typically involve larger loan balances to single borrowers or groups of related borrowers, which generally require substantially greater evaluation and oversight efforts. Our loan policies limit the amount of loans to a single borrower or group of borrowers to reduce this risk and are designed to set such limits within

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those prescribed by applicable federal and state statutes and regulations. We engage a third party, twice a year, to conduct a credit review of the commercial real estate portfolio, including compliance with the Bank's underwriting standards and policy requirements.

Construction Loans. We originate loans to finance the construction of both one- to four-family homes and commercial real estate. These loans typically have a construction period of up to 12 months for residential construction and up to 24 months for commercial construction, whereby draws are taken and interest only payments are made. As part of the draw process, inspection and lien checks are required prior to the disbursement of the proceeds. Funds disbursed may not exceed up to 80% of the loan-to-value of land and up to 80% of loan-to-value of improvements at any time during the construction period. Interest rates on disbursed funds are based on the rates and terms set at closing. The majority of our commercial real estate construction loans are variable rate loans with rates tied to prime rate, plus a premium, while the majority of our one- to four-family real estate construction loans are fixed rate loans. A floor rate may also be established in conjunction with a variable rate loan. A minimum of interest only payments on disbursement funds must be made on a monthly basis. At the end of the construction period, the loan automatically converts to either a conventional residential or commercial real estate mortgage, as applicable. At December 31, 2017, construction loans totaled $30.9 million, or 8.4% of the total loan portfolio, and consisted of $30.8 million to finance construction of commercial real estate and $49,000 to finance construction of one- to four-family residential real estate.

Construction loans can be affected by economic conditions and the value of underlying property. Construction loans may have additional risks related to advancing loan funds during construction due to the uncertain value of the property prior to the completion of construction.

Commercial Loans. In addition to commercial real estate loans, we also engage in commercial business lending also known as C&I lending primarily to small businesses. A commercial business loan may be a business installment loan, line of credit, and other commercial loan. At December 31, 2017, commercial business loans totaled $27.6 million, or 7.6% of the total loan portfolio. Most of our commercial business loans have fixed interest rates, and are for terms generally not in excess of five years. In underwriting commercial business loans, consideration is typically given to the financial condition and the debt service coverage capabilities of the borrower/project, projected cash flows and collateral value. Whenever possible, we collateralize these loans with a first lien on business assets and equipment and require personal guarantees from principals of the borrower. Interest rates on commercial business loans generally have higher yields than rates on one- to four-family residential mortgages. We offer commercial loan services designed to give business owners borrowing opportunities for modernization, inventory, equipment, construction, real estate, purchases or improvements, working capital, vehicle purchases, and the refinancing of existing corporate debt.

Commercial business loans are generally considered to involve a higher degree of risk than residential mortgage loans because the collateral underlying the loans may be in the form of furniture, fixtures, and equipment and/or inventory subject to market obsolescence and accounts receivable which must be monitored. Commercial business loans may also involve relatively large loan balances to single borrowers or groups of related borrowers, with the repayment of such loans typically dependent on the successful operation and income stream of the borrower. Such risks can be significantly affected by economic conditions. In addition, commercial business lending generally requires substantially greater oversight efforts compared to residential real estate lending. We engage a third party, twice a year, to conduct credit reviews of the commercial business loan portfolio, including compliance with the Bank's underwriting standards and policy requirements.

Consumer Loans. To a lesser extent, we offer a variety of consumer loans. At December 31, 2017, consumer loans totaled $1.4 million, or less than 1% of the total loan portfolio. The largest component of our consumer loan portfolio are personal consumer loans and overdraft lines of credit, which are available for amounts up to $5,000 for unsecured loans and greater amounts for secured loans depending on the type of loan and value of the collateral. Secured consumer loans, excluding overdraft lines of protection, generally are offered for terms of up to 10 years, depending on the collateral, at fixed interest rates. Our consumer loan portfolio also consists of vehicle loans, other unsecured consumer loans up to $5,000, loans secured by certificates of deposits, secured and unsecured property improvement loans, and other secured loans.

Generally, the volume of consumer lending has declined as borrowers have opted for home equity lines of credit, which have lower interest rates, as compared to unsecured loans or loans secured by property other than residential real estate. We make other consumer loans, which may or may not be secured. The terms of such loans vary depending on the collateral.

Consumer loans are generally originated at higher interest rates than residential mortgage loans or home equity loans but also tend to have a higher credit risk due to the loans being either unsecured or secured by rapidly depreciable assets. Furthermore, consumer loan payments are dependent on the borrower's continuing financial stability, and therefore are more likely to be adversely affected by job loss, divorce, illness or personal bankruptcy. The application of various federal and state laws, including federal and state bankruptcy and insolvency laws, may limit the amount which can be recovered on consumer loans in the event of a default. Despite these risks, our level of consumer loan delinquencies generally has been low. No assurance can be given, however, that our delinquency rate or losses will continue to remain low in the future.

Loan Participations. From time to time, we may originate a commercial real estate loan or commercial business loan which may exceed our internal lending or concentration limits and sell a portion of the loan to another community bank. The participating bank is typically located in New York State and its lending team is known by our commercial lenders. This allows our Bank to meet the needs of its customers and comply with its internal lending limits. In these circumstances, we follow our customary loan underwriting and approval policies. We have strong relationships with other community banks in our primary market area that may desire to purchase participations, and we may increase our sales of participations in the future, if deemed appropriate. At December 31, 2017, our sold commercial real estate loan participations totaled $7.4 million, all of which were collateralized by properties within our primary market area in Western New York. Our sold commercial business loan participations totaled $1.3 million as of December 31, 2017 and were secured by business assets located within Western New York.

Loan Approval Procedures and Authority. Our lending policies are approved by our Board of Directors. During 2017, home equity loans and consumer loans secured by real estate in excess of $25,000 and all one- to four-family residential mortgage loans up to $424,100 require approval by the Internal Residential Loan Committee. If these types of loans are between $424,100 and $1.0 million, then the approval of two individuals, one of whom must be a designated member of the management team, along with another member of the Internal Residential Loan Committee is required. If these types of loans are in excess of $1.0 million, then full Board approval is required. For all commercial loans, including commercial real estate loans, certain Executive Vice Presidents, Vice Presidents, and Commercial Lending Officers have authority to approve loans for total one obligor credit up to $100,000. Commercial loans with total one obligor credit in excess of $100,000 and up to $1.0 million require the approval of two members of the Internal Commercial Loan Committee, one of which must be either the: President and Chief Executive Officer or Executive Vice President – Commercial Division. Commercial loans with total one obligor credit in excess of $1.0 million and up to $3.0 million require majority approval by the Board Loan Committee. Commercial loans with total obligor credit in excess of $3.0 million require full Board approval.

Additionally, branch managers are granted authority to approve certain loans, mainly consumer loans, in smaller amounts deemed appropriate by our Board of Directors. Levels of lending authority for consumer loans are established and granted to specific branch managers and loan officers based on position and experience and are reviewed on an annual basis.

Current Lending Procedures. Upon receipt of a completed loan application from a prospective borrower, we order a credit report and verify certain other information. If necessary, we obtain additional financial or credit related information. We require an appraisal for all residential and commercial real estate loans and home equity loans, including loans made to refinance existing mortgage loans. Appraisals are performed by licensed third-party appraisal firms that have been approved by our Board of Directors. An appraisal management firm has been hired to handle all requests for appraisals on residential real estate loans. We require title insurance on all one- to four-family residential and commercial real estate loans and certain other loans. We also require hazard insurance on all real estate loans, and if applicable, we require borrowers to obtain flood insurance prior to closing. Based on loan-to-value ratios and lending guidelines, escrow accounts may be required for such items as real estate taxes, hazard insurance, flood insurance, and private mortgage insurance premiums.

Asset Quality

One of our key operating objectives has been, and continues to be, maintaining a high level of asset quality. Our high proportion of one- to four-family residential mortgage loans, the maintenance of sound credit standards for new loan originations and loan administration procedures, including third party loan reviews, and strong executive management focus on credit quality have been factors in monitoring and managing our levels of credit risk. These factors have contributed to our strong financial condition.

Collection Procedures. We have adopted a loan collection policy to maintain adequate control on the status of delinquent loans and to ensure compliance with the Fair Debt Collection Practices Act, the Dodd-Frank Act and the Consumer Protection Act. When a borrower fails to make required payments on a residential, home equity, commercial, or consumer loan, we take a number of steps to induce the borrower to cure the delinquency and restore the loan to a current status. Our Collections Department documents every time a borrower is contacted either by phone or in writing and maintains records of all collection efforts. Once an account becomes delinquent for 15 days, a late notice is mailed to the borrower and any guarantors on a loan. A second notice is mailed following the 30th day of delinquency. At this time, we also directly contact the borrower. Such contact may be repeated if a loan is delinquent between 60-89 days.

Once a one- to four-family residential loan has been delinquent for more than 90 days, the loan is deemed a “classified asset” and is reported to our Board of Directors. In 2010, amendments to the New York State (“NYS”) Real Property Actions and Proceedings Law (“RPAPL”) became effective whereby specific pre-foreclosure procedures for any one- to four-family residence located in NYS must be followed. When the Company wants to pursue foreclosure action against a borrower, the law requires us to mail a 90 day pre-foreclosure notice of the impending foreclosure action to the borrower prior to commencement of the action. Within three days of sending this notice, the collection department sends the notice information to the NYS Superintendent of Banks through the NYS Department of Financial Services’ online system. The Company must also send a 30-day demand letter to the borrower sixty days after the initial pre-foreclosure notice was sent. The demand letter includes updated loan balances regarding the potential foreclosure action. In order to receive approval for foreclosure action from the courts, the law requires a mandatory conference hearing between the court, borrower and bank. Prior to proceeding with any foreclosure action in the case of a secured loan, we will review the collateral to determine whether its possession would be cost-effective for us. In cases where the collateral fails to fully secure the loan, in addition to repossessing the collateral, we may also sue on the note underlying the loan.

If a commercial loan has been delinquent for more than 30 days, the loan file is reviewed for classification, and the borrower is contacted by the Collections Department or by a loan officer. If a commercial loan is 90 days or more past due, the loan is considered non-performing. If the delinquency continues, the borrower is advised of the date that the delinquency must be cured, or the loan is considered to be in default. At that time, foreclosure procedures are initiated on loans secured by real estate, and all other legal remedies are pursued.

The collection procedures for consumer loans include the sending of periodic late notices and letters to a borrower once a loan is past due. On a monthly basis, a review is made of all consumer loans which are 30 days or more past due. Consumer loans that are 180 days delinquent, where the borrowers have failed to demonstrate repayment ability, are classified as loss and charged-off. Once a charge-off decision has been made, the collections manager or management pursues the use of collection agencies or legal action such as small claims court, judgments, salary garnishment and repossessions in an attempt to collect the deficiency from the borrower.

Non-performing Loans and Non-performing Assets. We define non-performing loans as loans that are either non-accruing or accruing whose payments are 90 days or more past due, and non-accruing troubled debt restructurings. Loans are placed on non-accrual status either when reasonable doubt exists as to the full timely collection of interest and principal, or when a loan becomes 90 days past due, unless an evaluation by the internal Asset Classification Committee indicates that the loan is in the process of collection and is either guaranteed or well secured. When our Asset Classification Committee designates loans on which we stop accruing interest income as non-accrual loans, we reverse outstanding interest income that was previously credited. We may again recognize income in the period that we collect such income, when the ultimate collectability of principal is no longer in doubt. We return a non-accrual loan to accrual status when factors indicating doubtful collection no longer exist.

Real estate acquired as a result of foreclosure is classified as foreclosed real estate until such time as it is sold. We carry foreclosed real estate at its fair value less estimated selling costs at the date of acquisition. If a foreclosure action is commenced and the loan is not brought current, paid in full, or refinanced before the foreclosure sale, the property could be sold at the foreclosure sale (to an outside bidder). If not, and we retain the property, then we will sell the real property securing the loan as soon thereafter as practical. Our foreclosed real estate totaled $435,000 at December 31, 2017 and $412,000 at December 31, 2016.

Troubled debt restructurings ("TDRs") occur when we grant borrowers concessions that we would not otherwise grant but for economic or legal reasons pertaining to the borrower's financial difficulties. A concession is made when the terms of the loan modification are more favorable than the terms the borrower would have received in the current market under similar financial difficulties. These concessions may include, but are not limited to, modifications of the terms of the debt, the transfer of assets or the issuance of an equity interest by the borrower to satisfy all or part of the debt, or the substitution or addition of borrower(s). The Company identifies loans for potential TDRs primarily through direct communication with the borrower and evaluation of the borrower's financial statements, revenue projections, tax returns and credit reports. Even if the borrower is not presently in default, management will consider the likelihood that cash flow shortages, adverse economic conditions, and negative trends may result in a payment default in the near future. Generally, we will not return a TDR to accrual status until the borrower has demonstrated the ability to make principal and interest payments under the restructured terms for at least six consecutive months. Our TDRs are impaired loans, which may result in specific allocations of the allowance for loan losses and subsequent charge-offs if appropriate.

The following table presents information regarding our non-accrual loans, accruing loans delinquent 90 days or more, non-performing loans, foreclosed real estate, and non-performing and performing loans classified as troubled debt restructurings, as of the dates indicated.

	At December 31,				
	2017	2016	2015	2014	2013
	(Dollars in thousands)				
Loans past due 90 days or more but still accruing:					
Real estate loans:					
Residential, one- to four-family	$ -	$ 136	$ 47	$ -	$ 79
Home equity	-	24	88	1	2
Commercial	-	-	-	-	-
Construction	-	-	-	-	-
Other loans:					
Commercial	-	2	-	-	-
Consumer	-	-	27	9	-
Total	$ -	$ 162	$ 162	$ 10	$ 81
Loans accounted for on a non-accrual basis:					
Real estate loans:					
Residential, one- to four-family	$ 2,196	$ 2,165	$ 2,462	$ 2,413	$ 2,145
Home equity	235	329	361	335	325
Commercial	1,323	2,977	1,545	1,891	1,911
Construction	-	-	-	-	-
Other loans:					
Commercial	54	205	132	76	137
Consumer	25	28	6	4	7
Total non-accrual loans	3,833	5,704	4,506	4,719	4,525
Total non-performing loans	3,833	5,866	4,668	4,729	4,606
Foreclosed real estate	435	412	712	401	581
Total non-performing assets	$ 4,268	$ 6,278	$ 5,380	$ 5,130	$ 5,187
Ratios:					
Non-performing loans as a percent of total loans:	1.05 %	1.80 %	1.57 %	1.66 %	1.66 %
Non-performing assets as a percent of total assets:	0.82 %	1.28 %	1.14 %	1.05 %	1.08 %
Troubled debt restructuring:					
Loans accounted for on a non-accrual basis					
Real estate loans:					
Residential, one- to four-family	$ -	$ -	$ -	$ -	$ 48
Home equity	19	19	-	-	-
Other loans:					
Commercial	-	109	-	-	-
Performing loans					
Real estate loans:					
Residential, one- to four-family	$ 184	$ 190	$ 216	$ 224	$ 144
Home equity	2	3	8	10	4

Our recorded investment in non-accrual loans totaled \$3.8 million at December 31, 2017 and \$5.7 million at December 31, 2016. The \$1.9 million decrease in non-accrual loans was primarily due to a \$1.7

million decrease in non-performing commercial real estate loans. This decrease was primarily due to the payoff of two non-performing commercial real estate loans, with aggregate loan balances of $1.3 million as of December 31, 2016. If all non-accrual loans had been current in accordance with their terms during the years ended December 31, 2017, 2016 and 2015, interest income on such loans would have amounted to $267,000, $366,000 and $391,000, respectively.

Classification of Loans. Federal regulations require us to regularly review and classify our loans. In addition, our regulators have the authority to identify problem loans and, if appropriate, require them to be classified. There are three classifications for problem loans: substandard, doubtful and loss. "Substandard loans" have one or more defined weaknesses and are characterized by the distinct possibility that we will sustain some loss if the deficiencies are not corrected. A substandard loan would be one inadequately protected by the current net worth and paying capacity of the obligor or pledged collateral, if applicable. "Doubtful loans" have all the weaknesses inherent in substandard loans with the additional characteristic that the weaknesses present make collection or liquidation in full on the basis of currently existing facts, conditions and values questionable, and there is a high possibility of loss. A loan classified as a "loss" is considered uncollectible and of such little value that its continuance on the books is not warranted. This does not mean that an asset does not have recovery or salvage value, but simply that it is not practical or desirable to defer writing off all or a portion of a worthless asset even though partial recovery may occur in the future. Regulations also provide for a "special mention" category (i.e. criticized loans), described as loans which do not currently expose us to a sufficient degree of risk to warrant classification but do possess credit deficiencies or potential weaknesses deserving our close attention.

The allowance for loan losses is established through a provision for loan losses based on management's evaluation of the losses inherent in the loan portfolio. When we classify loans as either substandard or doubtful, we set aside a loss reserve for such loans as we deem prudent. When we classify problem loans as loss, we typically charge-off the loan balance outstanding against the allowance for loan losses reserve. Our determination as to the classification of our loans and the amount of our loss allowances are subject to review by our regulators, which can require that we establish additional loss allowances. We regularly review our loan portfolio to determine whether any loans require classification in accordance with applicable regulations.

The following table shows the aggregate amounts of our classified and criticized loans at the dates indicated.

	At December 31,	
	2017	2016
	(Dollars in thousands)	
Special mention loans	$ 1,959	$ 2,056
Substandard loans	6,550	7,053
Doubtful loans	-	15
Loss loans	2	1
Total classified and criticized loans	$ 8,511	$ 9,125

The total classified and criticized loans as of December 31, 2017 and 2016 includes $3.8 million and $5.9 million of nonperforming loans, respectively.

Delinquencies. The following table provides information about delinquencies in our loan portfolio at the dates indicated.

	At December 31,					
	2017		2016		2015	
	60-89 Days Past Due	90 + Days Past Due	60-89 Days Past Due	90 + Days Past Due	60-89 Days Past Due	90 + Days Past Due
	(Dollars in thousands)					
Real estate loans:						
Residential, one- to four-family	$ 942	$ 1,233	$ 782	$ 1,038	$ 789	$ 1,291
Home equity	59	212	206	158	32	354
Commercial	-	1,265	-	2,977	-	1,248
Construction	-	-	-	-	-	-
Other loans:						
Commercial	8	54	19	56	-	30
Consumer	2	22	-	28	5	28
Total	$ 1,011	$ 2,786	$ 1,007	$ 4,257	$ 826	$ 2,951

Allowance for Loan Losses. The allowance for loan losses is a valuation account that reflects our evaluation of the losses inherent in our loan portfolio. We maintain the allowance through provisions for loan losses that we charge to income. We charge losses on loans against the allowance for loan losses when we believe the collection of the loan is unlikely.

Our evaluation of risk in maintaining the allowance for loan losses includes the review of all loans on which the collectability of principal may not be reasonably assured. We consider the following qualitative and environmental factors as part of this evaluation: historical loan loss experience; payment status; the estimated value of the underlying collateral; changes in lending policies, procedures and loan review system; changes in the experience, ability, and depth of lending management and other relevant staff; trends in loan volume and the nature of the loan portfolio; and national and local economic conditions. There may be other factors that may warrant consideration in maintaining an allowance at a level sufficient to provide for probable loan losses. Although our management believes that it has established and maintained the allowance for loan losses to reflect losses inherent in our loan portfolio, based on its evaluation of the factors noted above, future additions may be necessary if economic and other conditions differ substantially from the current operating environment.

In addition, various regulatory agencies periodically review our allowance for loan losses as an integral part of their examination process. These agencies, including the Office of the Comptroller of the Currency, may require us to increase the allowance for loan losses or the valuation allowance for foreclosed real estate based on their evaluation of the information available to them at the time of their examination.

The allowance consists of allocated, general and unallocated components. The allocated component relates to loans that are classified as doubtful, substandard, loss or special mention. See "Asset Quality – Classification of Loans." For such loans that are also classified as impaired, an allowance is established when the discounted cash flows, collateral value or observable market price of the impaired loan is lower than the carrying value of the loan. The general component covers non-classified loans and is based on historical loss experience adjusted for qualitative and environmental factors, as mentioned above. An unallocated component may be maintained to cover uncertainties that could affect management's estimate of probable losses, such as downturns in the local economy. The unallocated component of the allowance reflects the margin of imprecision inherent in the underlying assumptions used in the methodologies for estimating allocated and general losses in the portfolio.

A loan is considered impaired when, based on current information and events, it is probable that we will not be able to collect the scheduled payments of principal and interest when due according to the contractual terms of the loan agreement. Factors considered by management in determining impairment include payment status, collateral value, and the probability of collecting scheduled principal and interest payments when due. Impairment is measured on a loan-by-loan basis for commercial real estate loans and commercial loans by either the present value of expected future cash flows discounted at the loan's effective interest rate or the fair value of the collateral if the loan is collateral dependent. Large groups of smaller balance homogeneous loans are collectively evaluated for impairment. Accordingly, we do not separately identify individual consumer, home equity or one- to four-family real estate loans for impairment disclosures, unless they are subject to a troubled debt restructuring or part of the assessment of a larger loan relationship.

The following table details the number and recorded investment of impaired loans for the dates indicated:

	At December 31,			
	2017		2016	
	Number of Loans	Recorded Investment	Number of Loans	Recorded Investment
	(Dollars in thousands)			
Real estate loans:				
Residential, one- to four-family	5	$ 184	5	$ 190
Home equity	2	21	2	22
Commercial(1)	4	1,498	6	3,162
Construction	-	-	-	-
Other loans:				
Commercial	1	54	2	163
Consumer	-	-	-	-
Total	12	$ 1,757	15	$ 3,537

(1) The decrease in impaired commercial real estate loans from 2016 to 2017 was primarily due to one commercial real estate loan, with a loan balance of $1.0 million which paid off in full during 2017 and one commercial real estate loan, with a loan balance of $433,000 which went into foreclosure during 2017.

Refer to Note 5 in the Notes to the Consolidated Financial Statements for more information on our impaired loans.

Provision for loan losses decreased by $615,000, or 54.7%, to $510,000 for the year ended December 31, 2017 from $1.1 million for the year ended December 31, 2016. The decrease in provision expense was primarily due to an improvement in non-performing loan ratios and a decrease in net-charge offs during the year ended December 31, 2017. The ratio of nonperforming loans to total net loans was 1.05% as of December 31, 2017 which was a 75 basis points decrease from 1.80% at December 31, 2016, primarily due to a $1.7 million decrease in non-performing commercial real estate loans. The decrease in non-performing commercial real estate loans was primarily due to the payoff of two commercial real estate loans, with aggregate loan balances of $1.3 million as of December 31, 2016. The majority of our non-performing loans are one- to four-family residential mortgage loans or commercial real estate loans backed by first lien collateral on real estate held in the Western New York region. Western New York's real estate market has consistently demonstrated price stability. Furthermore, the Company has conservative underwriting standards and strong lending policies and procedures.

The following table sets forth activity in our allowance for loan losses and other ratios at or for the years indicated:

	At or for the Year Ended December 31,				
	2017	2016	2015	2014	2013
	(Dollars in thousands)				
Balance at beginning of year	$ 2,882	$ 1,985	$ 1,921	$ 1,813	$ 1,806
Provision for loan losses	510	1,125	400	222	105
Charge-offs:					
Real estate loans:					
Residential, one- to four-family	-	(107)	(64)	(26)	(51)
Home equity	(3)	(19)	(29)	(39)	-
Commercial	(75)	(1)	(267)	-	(21)
Construction	-	-	-	-	-
Other loans:					
Commercial	(20)	(76)	(9)	(25)	(47)
Consumer	(41)	(54)	(46)	(44)	(32)
Total charge-offs	(139)	(257)	(415)	(134)	(151)
Recoveries:					
Real estate loans:					
Residential, one- to four-family	3	12	13	6	35
Home equity	4	1	8	1	5
Commercial	-	-	32	-	9
Construction	-	-	-	-	-
Other loans:					
Commercial	9	2	18	-	3
Consumer	14	14	8	13	1
Total recoveries	30	29	79	20	53
Net charge-offs	(109)	(228)	(336)	(114)	(98)
Balance at end of year	$ 3,283	$ 2,882	$ 1,985	$ 1,921	$ 1,813
Average loans outstanding	$ 352,309	$ 312,359	$ 292,240	$ 276,360	$ 271,705
Allowance for loan losses as a percent of total net loans	0.90%	0.88%	0.67%	0.67%	0.65%
Allowance for loan losses as a percent of non-performing loans	85.65%	49.13%	42.52%	40.62%	39.36%
Ratio of net charge-offs to average loans outstanding	0.03%	0.07%	0.11%	0.04%	0.04%

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The following table presents our allocation of the allowance for loan losses by loan category and the percentage of loans in each category to total loans at the years indicated. The allowance for loan losses allocated to each category is not necessarily indicative of inherent losses in any particular category and does not restrict the use of the allowance to absorb losses in other categories.

	At December 31, 2017			2016			2015			2014	
	Amount	% of Allowance to Total Allowance	% of Loans in Category to Total Loans	Amount	% of Allowance to Total Allowance	% of Loans in Category to Total Loans	Amount	% of Allowance to Total Allowance	% of Loans in Category to Total Loans	Amount	% of Allowanc to Total Allowanc
	(Dollars in thousands)										
Real Estate Loans:											
Residential, one- to four-family	$ 511	15.6%	39.6%	$ 431	14.9%	45.8%	$ 351	17.7%	53.1%	$ 446	23.2%
Home equity	122	3.7%	10.4%	114	4.0%	10.9%	120	6.0%	11.1%	106	5.5%
Commercial(1)	1,663	50.7%	33.6%	1,803	62.6%	32.8%	1,204	60.7%	28.4%	1,163	60.5%
Construction(2)	347	10.6%	8.5%	150	5.2%	3.8%	59	3.0%	1.6%	-	-
	2,643	80.6%	92.1%	2,498	86.7%	93.3%	1,734	87.4%	94.2%	1,715	89.2%
Other loans:											
Commercial(3)	544	16.6%	7.6%	338	11.7%	6.3%	197	9.9%	5.3%	184	9.6%
Consumer	35	1.0%	0.3%	28	1.0%	0.4%	22	1.1%	0.5%	22	1.2%
	579	17.6%	7.9%	366	12.7%	6.7%	219	11.0%	5.8%	206	10.8%
Total allocated	$ 3,222	98.2%	100.0%	$ 2,864	99.4%	100.0%	$ 1,953	98.4%	100.0%	$ 1,921	100.0%
Total unallocated	61	1.8%		18	0.6%		32	1.6%		-	-
Balance at end of year	$ 3,283	100.0%		$ 2,882	100.0%		$ 1,985	100.0%		$ 1,921	100.0%

(1) The increase as of December 31, 2016 was primarily due to growth in our commercial real estate portfolio and an increase in reserves set aside for one commercial real estate loan.

(2) The increase as of December 31, 2017 was due to the significant growth in construction loans to finance commercial real estate renovations and construction.

(3) The increase as of December 31, 2017 was primarily due to growth in commercial business loan originations.

Investment Activities

General. Our Board of Directors reviews and approves our investment policy on an annual basis. This policy dictates that investment decisions be made based on the safety of the investment, liquidity requirements, potential returns, cash flow targets, and consistency with our interest rate risk management strategy. The Board of Directors has delegated primary responsibility for ensuring that the guidelines in the investment policy are followed to the President and Chief Executive Officer and the Chief Financial Officer and Treasurer. Our President and Chief Executive Officer or our

Chief Financial Officer and Treasurer are responsible for making securities portfolio decisions in accordance with established plans and policies and have the authority to purchase and sell securities within the specific guidelines established by the investment policy. In addition, all transactions are reviewed by the Asset/Liability Committee of the Board of Directors which meets at least quarterly.

All of our securities carry market risk, as increases in market rates of interest may cause a decrease in the fair value of the securities. Our investment policy is designed primarily to manage the interest rate sensitivity of our assets and liabilities, to provide collateral for pledging requirements, to generate a favorable return without incurring undue interest rate or credit risk, to complement our lending activities and to provide and maintain liquidity within established guidelines. Our investment policy outlines the pre-purchase analysis, credit, and interest rate risk assessment guidelines and due diligence documentation required for all permissible investments. In addition, our policy requires management to routinely monitor the investment portfolio as well as the markets for changes which may have a material, negative impact on the credit quality of our holdings.

In establishing our investment strategies, we consider our interest rate sensitivity, the types of securities to be held, liquidity and other factors. The Company's current investment strategy utilizes a risk management approach of diversified investing among three categories: short-, intermediate-, and long-term. The emphasis of this approach is to increase overall investment securities yields while managing interest rate risk. The Company has engaged an independent financial advisor to recommend investment securities according to a plan which has been approved by the Asset/Liability Committee and the Board of Directors. Federal savings banks have authority to invest in various types of assets, including U.S. Government obligations, securities of various federal agencies, obligations of states and municipalities, mortgage-backed and asset-backed securities, collateralized-mortgage obligations, certain time deposits of insured banks and savings institutions, certain bankers' acceptances, repurchase agreements, loans of federal funds, and, subject to certain limits, corporate debt and commercial paper.

All of the securities in our portfolio are classified as "available for sale." The securities are reported at fair value, and unrealized gains and losses on the securities are excluded from earnings and reported, net of deferred taxes, as a separate component of equity. Our current securities portfolio consists of collateralized mortgage obligations, mortgage backed securities, asset-backed securities, U.S. Government Agency bonds, and municipal bonds. Nearly all of our mortgage backed securities are directly or indirectly insured or guaranteed by FHLMC, the Government National Mortgage Association ("GNMA") or the Federal National Mortgage Association ("FNMA", or "Fannie Mae"). The municipal securities we invest in have maturities of 20 years or less and many have private insurance guaranteeing repayment. The majority of municipal securities in our portfolio are unlimited general obligation bonds.

We have investments in FHLBNY stock, which must be held as a condition of membership in the Federal Home Loan Bank system. The investment in FHLBNY stock is considered restricted and is reported at cost on the Consolidated Statements of Financial Condition.

Fair values of available for sale securities are based on a market approach, with the exception of three private-label asset-backed securities that are not currently trading in an active market. Fair values of these securities were calculated based on a cash flow approach. Securities which are fixed income instruments that are not quoted on an exchange, but are traded in active markets, are valued using prices obtained from our custodian, which used third party data service providers.

Classification of Investments. Federal regulations require us to regularly review and classify our investments based on credit risk in determining credit quality of investment portfolios as well as for calculating risk based capital. A decline in the market value of a security due to interest rate fluctuations is not a basis for adverse classification. Instead, the classification is based on the likelihood of the timely and full collection of principal and interest.

In assessing the credit quality of securities in our investment portfolio, we conduct an internal risk analysis, which includes a review of third party research and analytics. If our research indicates that an issuer of a security does not have adequate capacity to meet its financial obligations for the life of the asset, the Company will review the security and consider it for classification.

A security may be classified as Substandard, Doubtful or Loss. A "Substandard" classification indicates that the investment is inadequately protected by the sound worth and paying capacity of the obligor or of the collateral pledged. Investments classified as "Substandard" must have a well-defined weakness or weaknesses that jeopardize the liquidation of the debt, and the Company may sustain some loss if deficiencies are not corrected. A "Doubtful" classification has all the weaknesses of a "Substandard" classification with the added characteristic that the weaknesses make collection or liquidation in full highly questionable and improbable. Investments classified as "Loss" are considered uncollectible and their continuance as an asset of the Company is no longer warranted.

Our determination as to the classification of our investments is subject to review by our regulators. We regularly review our investment portfolio to determine whether any investments require classification in

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accordance with applicable regulations. Our review of our investment portfolio at December 31, 2017 resulted in three private-label asset-backed securities that were considered for classification, as the issuer may not have an adequate capacity to meet its financial commitments over the projected life of the investment or the risk of default by the obligor was possible, resulting in an expectation that the Bank would not receive the full and timely repayment of principal and interest as expected. These three securities had an amortized cost of $69,000 and fair value of $344,000 at December 31, 2017. All three securities were classified as "Substandard." These securities were also evaluated for other-than-temporary impairment and we concluded that no other than temporary impairment charges needed to be recorded during the years ended December 31, 2017, 2016 and 2015. During the years ended December 31, 2017, 2016 and 2015, we recaptured $135,000, $142,000 and $160,000, respectively, of prior year other-than-temporary impairment charges. The recaptured amounts are reflected in the "recovery on previously impaired investment securities" line item in the Consolidated Statements of Income shown in "Part IV Exhibits and Financial Schedules."

The following table presents the composition of our securities portfolio in dollar amount of each investment type at the dates indicated.

	At December 31,					
	2017		2016		2015	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value	Amortized Cost	Fair Value
	(Dollars in thousands)					
Securities available for sale:						
U.S. Government Agencies	$ 2,013	$ 1,987	$ -	$ -	$ -	$ -
U.S. Treasury bonds	-	-	-	-	12,778	14,111
Municipal bonds	44,256	45,562	48,869	50,698	49,064	51,808
Mortgage-backed securities:						
Collateralized mortgage obligations -private label	30	30	37	37	48	48
Collateralized mortgage obligations -government sponsored entities	28,195	27,654	29,171	28,831	38,838	38,342
Government National Mortgage Association	229	245	306	329	396	427
Federal National Mortgage Association	2,834	2,929	3,457	3,581	4,355	4,542
Federal Home Loan Mortgage Corporation	1,518	1,553	1,825	1,867	2,217	2,301
Asset-backed securities-private label	69	344	484	832	1,099	1,501
Asset-backed securities-government sponsored entities	57	60	71	76	89	97
Equity securities	22	57	22	84	22	36
Total available for sale	$ 79,223	$ 80,421	$ 84,242	$ 86,335	$ 108,906	$ 113,213

The decrease in the securities portfolio since December 31, 2015 reflects the goals and objectives of our business plan to shift the mix of our interest earning assets towards a greater percentage of loans versus securities.

At December 31, 2017, we did not have any non-U.S. Government and Government agency securities that exceeded 10.0% of our equity.

Investment Securities Portfolio, Maturities and Yields. The following table sets forth the scheduled maturities, amortized cost and weighted average yields for our investment portfolio, with the exception of equity securities, at December 31, 2017. Due to repayments of the underlying loans, the average life maturities of mortgage-backed and asset-backed securities generally are substantially less than the final maturities. The weighted average yield does not include the impact of a tax-equivalent adjustment for bank qualified municipals.

	More than One Year through Five Years		More than Five Years through Ten Years		More than Ten Years		Total Securities		
	Amortized Cost	Weighted Average Yield	Amortized Cost	Weighted Average Yield	Amortized Cost	Weighted Average Yield	Amortized Cost	Fair Value	Weighted Average Yield
	(Dollars in thousands)								
Securities available for sale:									
U.S. Government Agencies	$ -	0.00%	$ -	0.00%	$ 2,013	2.89%	$ 2,013	$ 1,987	2.89%
Municipal bonds	3,601	3.66%	23,575	3.58%	17,080	3.29%	44,256	45,562	3.47%
Mortgage-backed securities	63	3.72%	1,301	3.08%	31,442	2.38%	32,806	32,411	2.41%
Asset-backed securities	-	-	-	-	126	5.17%	126	404	5.17%
Total securities available for sale	$ 3,664	3.66%	$ 24,876	3.55%	$ 50,661	2.71%	$ 79,201	$ 80,364	3.02%

Sources of Funds

Deposits. We offer a variety of deposit accounts having a range of interest rates and terms. We currently offer regular savings deposits (consisting of Christmas Club, passbook and statement savings accounts), money market savings and checking accounts, interest bearing and non-interest bearing checking accounts (i.e., demand deposits), health savings accounts, retirement accounts, time deposits and Interest on Lawyer Accounts (“IOLA”). In addition to accounts for individuals, we also offer commercial savings, checking and money market accounts designed for the businesses operating in our market area.

Deposit flows are influenced significantly by general and local economic conditions, changes in prevailing interest rates, pricing of deposits, and competition. Our deposits are obtained from communities surrounding our offices and we rely primarily on paying competitive rates, service, and long-standing relationships with customers to attract and retain these deposits. We do not rely on brokers to obtain deposits, although we are a participant in the Certificate of Deposit Account Registry Service (“CDARS”), which is a form of brokered deposit program. This program offers our depositors enhanced FDIC insurance coverage. At December 31, 2017 and 2016, we had $5.5 million and $2.0 million, respectively, of brokered deposits from the CDARS program.

When we determine our deposit rates, we consider local competition, U.S. Treasury securities offerings, our liquidity needs, and the rates charged on other sources of funds. We generally review our deposit mix and pricing on a weekly basis. Our deposit pricing strategy has generally been to offer competitive rates and to be towards the top of the local market for rates on most types of deposit products. Core deposits (defined as savings deposits, money market accounts, demand deposit accounts and other interest bearing checking accounts) represented 63.4% and 61.9% of total deposits on December 31, 2017 and 2016, respectively.

Deposits are our major source of funds for lending and other investment purposes. We may also borrow funds, primarily from the FHLBNY, to supplement the amount of funds available for lending and daily operations. In addition, we derive funds from loan and mortgage-backed securities principal repayments and prepayments and from interest and proceeds from the maturity and call of investment securities. Loans and securities payments are a relatively stable source of funds, while deposit inflows and outflows are significantly influenced by pricing strategies and money market conditions.

The following table presents the distribution of our deposit accounts at the dates indicated by dollar amount and percent of portfolio:

	At December 31, 2017		2016		2015	
	Amount	Percent of total deposits	Amount	Percent of total deposits	Amount	Percent of total deposits
	(Dollars in thousands)					
Deposit type:						
Savings	$ 52,922	13.06%	$ 52,404	13.58%	$ 44,613	12.09%
Money market	99,305	24.51%	78,401	20.32%	76,231	20.64%
Interest bearing demand	49,869	12.31%	52,058	13.49%	44,512	12.06%
Non-interest bearing demand	54,618	13.48%	55,889	14.48%	45,224	12.25%
Total core deposits	256,714	63.36%	238,752	61.87%	210,580	57.04%
Time deposits with original maturities of:						
Three months or less	1,092	0.27%	1,347	0.35%	1,817	0.49%
Over three months to twelve months	29,669	7.32%	29,109	7.54%	31,954	8.66%
Over twelve months to twenty-four months	25,696	6.34%	25,935	6.72%	28,835	7.81%
Over twenty-four months to thirty-six months	7,372	1.82%	7,372	1.91%	7,853	2.13%
Over thirty-six months to forty-eight months	5,078	1.25%	4,476	1.16%	3,503	0.95%
Over forty-eight months to sixty months	79,328	19.58%	78,716	20.40%	84,358	22.85%
Over sixty months	204	0.06%	186	0.05%	255	0.07%
Total time deposits	148,439	36.64%	147,141	38.13%	158,575	42.96%
Total deposits	$ 405,153	100.00%	$ 385,893	100.00%	$ 369,155	100.00%

At December 31, 2017 and 2016, time deposits with remaining terms to maturity of less than one year amounted to $57.5 million and $66.8 million, respectively.

The following table presents our time deposit accounts categorized by interest rates which mature during each of the years set forth below and the amounts of such time deposits by interest rate at December 31, 2017, 2016 and 2015.

	Period to maturity at December 31, 2017				At December 31,		
	Less than One Year	More than One Year to Two Years	More than Two Years to Three Years	More than Three Years	2017	2016	2015
	(Dollars in thousands)						
Interest Rate Range							
0.49% and below	$ 28,086	$ 1,612	$ -	$ -	$ 29,698	$ 36,389	$ 42,810
0.50% to 0.99%	8,395	4,785	1,206	-	14,386	19,515	26,020
1.00% to 1.99%	20,903	12,877	28,793	38,090	100,663	89,065	84,977

2.00% to 2.99%	114	171	2,401	1,006	3,692	2,172	4,768
Total	$ 57,498	$ 19,445	$ 32,400	$ 39,096	$ 148,439	$ 147,141	$ 158,575

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At December 31, 2017, we had $67.5 million in time deposits with balances of $100,000 or more maturing as follows:

Maturity Period	Amount (In thousands)
Three months or less	$ 4,550
Over three months through six months	3,351
Over six months to twelve months	13,381
Over twelve months	46,235
Total	$ 67,517

Additional information regarding our deposits is included in Note 7 in the Notes to our Consolidated Financial Statements beginning on page F-1. Also, refer to “Part II, Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations—Liquidity and Capital Resources” for additional information on sources of funds.

Short-term Borrowings. Historically, our borrowings have consisted of a mix of short-term and long-term Federal Home Loan Bank of New York (“FHLBNY”) advances. We did not have any short-term borrowings on our statement of financial condition as of December 31, 2017 and 2016.

Additional information regarding our borrowings is included in Note 8 in the Notes to our Consolidated Financial Statements beginning on page F-1.

Subsidiary Activities

Lake Shore Savings is the only subsidiary of Lake Shore Bancorp. Lake Shore Savings has no subsidiaries.

Personnel

As of December 31, 2017, we had 108 full-time employees and 6 part-time employees. The employees are not represented by a collective bargaining unit and we consider our relationship with our employees to be good.

Supervision and Regulation

General

Lake Shore Savings Bank, a federally chartered savings bank, is subject to regulation, examination and supervision by the OCC, while Lake Shore Bancorp, Inc. and Lake Shore, MHC, which are federally chartered savings and loan holding companies, are subject to regulation, examination and supervision by the Federal Reserve Board. This regulation and supervision establishes a comprehensive framework of activities in which an institution may engage and is intended primarily for the protection of the FDIC's deposit insurance fund and depositors. Under this system of federal regulation, financial institutions are periodically examined to ensure that they satisfy applicable standards with respect to their capital adequacy, asset quality, management, earnings, liquidity and sensitivity to market interest rates. Lake Shore Savings also is a member of and owns stock in the Federal Home Loan Bank of New York, which is one of the twelve regional banks in the Federal Home Loan Bank System. Lake Shore Savings also is regulated, to a lesser extent, by the FDIC with respect to insurance of deposit accounts and the Federal Reserve Board, with respect to reserves to be maintained against deposits and other matters. Lake Shore Savings' relationship with its depositors and borrowers also is regulated to a great extent by both federal and state laws, especially in matters concerning the ownership of deposit accounts and the form and content of Lake Shore Savings' mortgage documents.

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") has significantly changed the bank regulatory structure and is affecting the lending, investment, trading and operating activities of depository institutions and their holding companies. New regulations being enacted to implement the Dodd-Frank Act and any future change in laws or regulations, whether enacted by Congress or implemented by the FDIC, the OCC, or the Federal Reserve Board, could have a material adverse impact on Lake Shore, MHC, Lake Shore Bancorp and Lake Shore Savings and their operations.

Certain of the regulatory requirements that are or will be applicable to Lake Shore Savings, Lake Shore Bancorp and Lake Shore, MHC are described below. This description of statutes and regulations is not intended to be a complete explanation of such statutes and regulations and their effect on Lake Shore Savings, Lake Shore Bancorp and Lake Shore, MHC and is qualified in its entirety by reference to the actual statutes and regulations.

Dodd-Frank Act

The Dodd-Frank Act created a new Consumer Financial Protection Bureau ("CFPB") as an independent bureau of the Federal Reserve Board. The CFPB assumes responsibility for the implementation of the federal financial consumer protection and fair lending laws and regulations, a function previously assigned to prudential regulators, and has authority to impose new requirements. However, institutions of less than $10 billion in assets, such as the Bank, continue to be examined for compliance with consumer protection and fair lending laws and regulations by, and be subject to the enforcement authority of, their primary regulator rather than the CFPB.

The Dodd-Frank Act, among other things:

- directed changes in the way that institutions are assessed for deposit insurance;
- mandated the imposition of consolidated capital requirements on savings and loan holding companies;
- required originators of securitized loans to retain a percentage of the risk for sold loans;
- regulated rate-setting for certain debit card interchange fees;
- repealed restrictions on the payment of interest on commercial demand deposits; and
- contained a number of reforms related to mortgage originations.

The Dodd-Frank Act increased shareholder influence over boards of directors by requiring companies to give shareholders a non-binding vote on executive compensation and so called "Golden Parachute" payments. In addition, the CFPB has finalized a rule implementing the "Ability to Repay" requirements of the Dodd-Frank Act. The regulations generally require creditors to make a reasonable, good faith determination as to a borrower's ability to repay most residential mortgage loans. The rule also sets standards for mortgage servicing, loan originator compensation, and requirements for high-cost mortgages, appraisal and escrow standards. The final rule establishes a safe harbor for certain "Qualified Mortgages," which contain certain features deemed less risky and omit certain other characteristics considered to enhance risk. The Ability to Repay final rules were effective January 1, 2014. On October 3, 2015, the new TILA-RESPA Integrated Disclosure (“TRID”) rules for mortgage closings took effect for new loan applications. In 2017, the CFPB amended the TRID rule with an effective day of October 1, 2018.

Federal Banking Regulation

Business Activities. A federal savings bank derives its lending and investment powers from the Home Owners’ Loan Act, as amended, and the regulations of the OCC. Under these laws and regulations, Lake Shore Savings may originate mortgage loans secured by residential and commercial real estate, commercial business loans and consumer loans, and it may invest in certain types of debt securities and certain other assets. Certain types of lending, such as commercial real estate, commercial business and consumer loans, are subject to an aggregate limit calculated as a specified percentage of Lake Shore Savings’ capital or assets. Specifically, Lake Shore Savings may invest in non-residential real estate loans which may not in the aggregate exceed 400% of capital, commercial business loans up to 20% of assets in the aggregate and consumer loans up to 35% of assets

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in the aggregate. Lake Shore Savings also may establish subsidiaries that may engage in activities not otherwise permissible for Lake Shore Savings, including real estate investment and securities and insurance brokerage.

Capital Requirements. Federal regulations require a federal savings bank to meet certain minimum capital standards. In July 2013, the federal banking agencies issued a final rule that revised the leverage and risk-based capital requirements and the method for calculating risk-weighted assets to make them consistent with the agreements that were reached by the Basel Committee on Banking Supervision in “Basel III: A Global Regulatory Framework for More Resilient Banks and Banking Systems” (“Basel III”) and with certain provisions of the Dodd-Frank Act, which became effective on January 1, 2015.

The revised rule established a new minimum common equity Tier 1 (“CET1”) capital ratio of 4.5% of risk-weighted assets, a uniform minimum leverage ratio of 4%, increased the minimum Tier 1 capital to risk-weighted assets ratio from 4% to 6% of risk-weighted assets and maintained the total capital ratio of at least 8% of risk-weighted assets. Under the new standards, in order to be considered well-capitalized, the Bank must have a CET1 ratio of 6.5%, a Tier 1 ratio of 8%, a total risk-based capital ratio of 10% and a leverage ratio of 5%. The final rule requires unrealized gains and losses on certain “available for sale” securities holdings to be included for purposes of calculating regulatory capital unless a one-time opt-out is exercised. Lake Shore Savings Bank has exercised this one-time opt-out and therefore excluded unrealized gains and losses on certain “available-for-sale” securities holdings for purposes of calculating regulatory capital. Additional restraints are also imposed on the inclusion in regulatory capital of mortgage-servicing assets, deferred tax assets and minority interests.

Core capital is defined as common stockholders’ equity (including retained earnings but excluding accumulated other comprehensive income), certain noncumulative perpetual preferred stock and related surplus and minority interests in equity accounts of consolidated subsidiaries, less intangibles other than certain mortgage servicing rights and credit card relationships. The components of supplementary capital currently include cumulative preferred stock, long-term perpetual preferred stock, mandatory convertible securities, subordinated debt and intermediate preferred stock, the allowance for loan and lease losses limited to a maximum of 1.25% of risk-weighted assets and up to 45% of net unrealized gains on available-for-sale equity securities with readily determinable fair market values. Overall, the amount of supplementary capital included as part of total capital cannot exceed 100% of core capital. Additionally, a savings bank that retains credit risk in connection with an asset sale may be required to maintain additional regulatory capital because of the recourse back to the savings bank. In assessing an institution’s capital adequacy, the federal regulators take into consideration not only these numeric factors but also qualitative factors as well, and has the authority to establish higher capital requirements for individual associations where necessary.

In determining the amount of risk-weighted assets, all assets, including certain off-balance sheet assets, are multiplied by a risk-weight factor of 0% to 1,250%, assigned by federal regulations based on the risks believed inherent in the type of asset. The new capital requirements assigns a higher risk weight (150%) to exposures that are more than 90 days past due or are on nonaccrual status and to certain commercial real estate facilities that finance the acquisition, development or construction of real property.

The final rule limits a banking organization's capital distributions and certain discretionary bonus payments if the banking organization does not hold a "capital conservation buffer" consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets in addition to the amount necessary to meet its minimum risk-based capital requirements. The capital conservation buffer requirement is being phased in beginning January 1, 2016 at 0.625% and ending January 1, 2019, when the full capital conservation buffer requirement will be effective. For 2018, the capital conservation buffer will be 1.875% of risk-weighted assets.

At December 31, 2017, Lake Shore Savings' capital exceeded all applicable minimal capital requirements.

Loans to One Borrower. Generally, a federal savings bank may not make a loan or extend credit to a single or related group of borrowers in excess of 15% of unimpaired capital and surplus. An additional amount may be loaned, equal to 10% of unimpaired capital and surplus, if the loan is secured by readily marketable collateral, which generally does not include real estate. As of December 31, 2017, Lake Shore Savings Bank was in compliance with the loans-to-one borrower limitations.

Qualified Thrift Lender Test. As a federal savings bank, Lake Shore Savings is subject to a qualified thrift lender, or "QTL," requirement by meeting one of two tests: The Home Owners' Loan Act ("HOLA") QTL test or the Internal Revenue Service ("IRS") Domestic Building and Loan Association ("DBLA") test. The federal savings bank may use either test to qualify and may switch from one test to the other.

Under the HOLA QTL test, Lake Shore Savings must maintain at least 65% of its "portfolio assets" in "qualified thrift investments" in at least nine months of the most recent 12-month period. "Portfolio assets" generally means total assets of a savings institution, less the sum of specified liquid assets up to 20% of total assets, goodwill and other intangible assets, and the value of property used in the conduct of the savings bank's business.

"Qualified thrift investments" includes various types of loans made for residential and housing purposes, investments related to such purposes, including certain mortgage-backed and related securities, and loans for personal, family, household and certain other purposes up to a limit of 20% of portfolio assets. "Qualified thrift investments" also include 100% of an institution's credit card loans, education loans and small business loans.

Under the IRS DBLA test, the Bank must meet the business operations test and the 60% of assets test. The business operations test requires that the federal savings bank's business consists primarily of acquiring the savings of the public (75% of its deposits, withdrawable shares, and other obligations must be held by the general public) and investing in loans (more than 75% of its gross income consists of interest on loans and government obligations and various other specified types of operating income that federal savings bank's ordinarily earn). For the 60% of assets test, the Bank must maintain at least 60% of its total in "qualified investments" as of the close of the taxable year or, at the option of the federal savings bank, may be computed on the basis of the average assets outstanding during the taxable year.

A savings bank that fails the QTL test must either convert to a commercial bank charter or operate under specified restrictions. The Dodd-Frank Act makes noncompliance with the QTL Test potentially subject to agency enforcement action for violation of law. At December 31, 2017, Lake Shore Savings Bank opted to utilize the HOLA QTL test and satisfied the requirements of this test for the entire 12-month period.

Capital Distributions. OCC regulations govern capital distributions by a federal savings bank, which include cash dividends, stock repurchases and other transactions charged to the capital account. A savings bank must file an application for approval of a capital distribution if:

- the total capital distributions for the applicable calendar year exceed the sum of the savings bank's net income for that year to date plus the savings bank's retained net income for the preceding two years;
- the savings bank would not be at least adequately capitalized following the distribution;
- the distribution would violate any applicable statute, regulation, agreement or OCC-imposed condition; or
- the savings bank is not eligible for expedited treatment of its filings.

Even if an application is not otherwise required, every federal savings bank that is a subsidiary of a holding company must still file a notice with the Federal Reserve Board at least 30 days before the board of directors declares a dividend or approves a capital distribution.

The Federal Reserve Board may disapprove a notice or application if:

- the savings bank would be undercapitalized following the distribution;
- the proposed capital distribution raises safety and soundness concerns; or
- the capital distribution would violate a prohibition contained in any statute, regulation or agreement.

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In addition, the Federal Deposit Insurance Act provides that an insured depository institution shall not make any capital distribution if, after making such distribution, the institution would be undercapitalized.

Liquidity. A federal savings institution is required to maintain a sufficient amount of liquid assets to ensure its safe and sound operation. We seek to maintain a ratio of liquid assets not subject to pledge as a percentage of deposits and borrowings of 15% or greater.

Community Reinvestment Act and Fair Lending Laws. All savings banks have a responsibility under the Community Reinvestment Act and related federal regulations to help meet the credit needs of their communities, including low-and moderate-income neighborhoods. In connection with its examination of a federal savings bank, the OCC is required to assess the savings bank's record of compliance with the Community Reinvestment Act. In addition, the Equal Credit Opportunity Act and the Fair Housing Act prohibit lenders from discriminating in their lending practices on the basis of characteristics specified in those statutes. A savings bank's failure to comply with the provisions of the Community Reinvestment Act could, at a minimum, result in denial of certain corporate applications, such as branches or mergers, or in restrictions on its activities. The failure to comply with the Equal Credit Opportunity Act and the Fair Housing Act could result in enforcement actions by the OCC, as well as other federal regulatory agencies and the Department of Justice. Lake Shore Savings Bank received a "satisfactory" Community Reinvestment Act rating in its most recent federal examination.

Transactions with Related Parties. A federal savings bank's authority to engage in transactions with its "affiliates" is limited by OCC regulations and by Sections 23A and 23B of the Federal Reserve Act. The term "affiliate" for these purposes generally means any company that controls, is controlled by, or is under common control with an insured depository institution such as Lake Shore Savings Bank. Lake Shore Bancorp, Inc. and Lake Shore, MHC are affiliates of Lake Shore Savings Bank. In general, transactions with affiliates must be on terms that are as favorable to the savings bank as comparable transactions with non-affiliates. In addition, certain types of these transactions are restricted to an aggregate percentage of the savings bank's capital. Collateral in specified amounts must usually be provided by affiliates in order to receive loans from the savings bank. In addition, OCC regulations prohibit a savings bank from lending to any of its affiliates that are engaged in activities that are not permissible for bank holding companies and from purchasing the securities of any affiliate, other than a subsidiary. Finally, transactions with affiliates must be consistent with safe and sound banking practices and may not involve low-quality assets. The OCC requires savings banks to maintain detailed records of all transactions with affiliates.

Lake Shore Savings' authority to extend credit to its directors, executive officers and 10% shareholders, as well as to entities controlled by such persons, is currently governed by the requirements of Sections 22(g) and 22(h) of the Federal Reserve Act and Regulation O of the Federal Reserve Board. Among other things, these provisions require that extensions of credit to insiders (i) be made on terms that are substantially the same as, and follow credit underwriting procedures that are not less stringent than, those prevailing for comparable transactions with unaffiliated persons and that do not involve more than the normal risk of repayment or present other unfavorable features, and (ii) not exceed certain limitations on the amount of credit extended to such persons, individually and in the aggregate, which limits are based, in part, on the amount of Lake Shore Savings Bank's capital. In addition, Lake Shore Savings Bank's board of directors must approve extensions of credit in excess of certain limits. Extensions of credit to executive officers are subject to additional restrictions based on the category of loan.

At December 31, 2017, Lake Shore Savings is in compliance with Regulation O.

Enforcement. The OCC has primary enforcement responsibility over federal savings institutions and has the authority to bring enforcement action against all "institution-affiliated parties," including stockholders, and attorneys, appraisers and accountants who knowingly or recklessly participate in wrongful action likely to have an adverse effect on an insured institution. Formal enforcement action may range from the issuance of a capital directive or cease and desist order, to removal of officers and/or directors of the institution and the appointment of a receiver or conservator. Civil penalties cover a wide range of violations and actions, and range up to $25,000 per day, unless a finding of reckless disregard is made, in which case penalties may be as high as $1.0 million per day. The FDIC also has the authority to terminate deposit insurance or to recommend to the OCC that enforcement action be taken with respect to a particular savings institution. If the OCC does not take action, the FDIC has authority to take action under specified circumstances.

Standards for Safety and Soundness. Federal law requires each federal banking agency to prescribe certain standards for all insured depository institutions. These standards relate to, among other things, internal controls, information systems and audit systems, loan documentation, credit underwriting, interest rate risk exposure, asset growth, compensation, and other operational and managerial standards as the agency deems appropriate. The federal banking agencies adopted Interagency Guidelines Prescribing Standards for Safety and Soundness to implement the safety and soundness standards required under federal law. The guidelines set forth the safety and soundness standards that the federal banking agencies use to identify and address problems at insured depository institutions before capital becomes impaired. The guidelines address internal controls and information systems, internal audit systems, credit underwriting, loan documentation, interest rate risk exposure, asset growth, compensation, fees and benefits. If the appropriate federal banking agency determines that an institution fails to meet any standard prescribed by the guidelines, the agency may require the institution to submit to the agency an acceptable plan to achieve compliance with the standard. If an institution fails to meet these standards, the appropriate federal banking agency may require the institution to submit a compliance plan.

Prompt Corrective Action Regulations. Under the prompt corrective action regulations, the OCC is required and authorized to take supervisory actions against undercapitalized federal savings banks. For this purpose, a savings bank is placed in one of the following five categories based on the savings bank's capital:

- well-capitalized (at least 5% leverage capital, 6.5% common equity Tier 1 risk-based capital, 8% Tier 1 risk-based capital and 10% total risk-based capital);
- adequately capitalized (at least 4% leverage capital, 4.5% common equity Tier 1 risk-based capital, 6% Tier 1 risk-based capital and 8% total risk-based capital);
- undercapitalized (less than 4% leverage capital, 4.5% common equity Tier 1 risk-based capital, 6% Tier 1 risk-based capital or 8% total risk-based capital);
- significantly undercapitalized (less than 3% leverage capital, 3% common equity Tier 1 risk-based capital, 4% Tier 1 risk-based capital or 6% total risk-based capital); and
- critically undercapitalized (less than 2% tangible capital).

Generally, the OCC is required to appoint a receiver or conservator for a savings bank that is "critically undercapitalized" within specific time frames. "Undercapitalized" institutions are subject to certain restrictions, such as on capital distributions and growth. The regulations also provide that a capital restoration plan must be filed with the OCC within 45 days of the date a savings bank receives notice that it is "undercapitalized," "significantly undercapitalized" or "critically undercapitalized." The criteria for an acceptable capital restoration plan include, among other things, the establishment of the methodology and assumptions for attaining adequately capitalized status on an annual basis, procedures for ensuring compliance with restrictions imposed by applicable federal regulations, the identification of the types and levels of activities the savings bank will engage in while the capital restoration plan is in effect, and assurances that the capital restoration plan will not appreciably increase the current risk profile of the savings bank. Any holding company for the savings bank required to submit a capital restoration plan must guarantee the lesser of: an amount equal to 5% of the savings bank's assets at the time it was notified or deemed to be undercapitalized by the OCC, or the amount necessary to restore the savings bank to adequately capitalized status. This guarantee remains in place until the OCC notifies the savings bank that it has maintained adequately capitalized status for each of four consecutive calendar quarters. The OCC has the authority to require payment and collect payment under the guarantee. The failure of a holding company to provide the required guarantee will result in certain operating restrictions on the savings bank, such as restrictions on the ability to declare and pay dividends, pay executive compensation and management fees, and increase assets or expand operations. The OCC may also take any one of a number of discretionary supervisory actions against undercapitalized savings banks, including the issuance of a capital directive and the replacement of senior executive officers and directors.

At December 31, 2017, Lake Shore Savings met the criteria for being considered “well-capitalized.”

Insurance of Deposit Accounts. Lake Shore Savings is a member of the Deposit Insurance Fund, which is administered by the FDIC. Deposit accounts in the Bank are insured by the FDIC. The Dodd-Frank Act permanently increased the maximum amount of deposit insurance for banks and savings institutions to $250,000 per depositor. The FDIC imposes an assessment for deposit insurance on all depository institutions.

The Dodd-Frank Act increased the minimum target Deposit Insurance Fund ratio from 1.15% of estimated insured deposits to 1.35% of estimated insured deposits. The FDIC must seek to achieve the 1.35% ratio by September 30, 2020. Insured institutions with assets of $10 billion or more are supposed to fund the increase. The Dodd-Frank Act eliminated the 1.5% maximum fund ratio, instead leaving it to the discretion of the FDIC and the FDIC has exercised that discretion by establishing a long term fund ratio of 2%.

Under the FDIC’s risk-based assessment system, insured institutions were assigned to risk categories based on supervisory evaluations, regulatory capital levels and certain other factors. An institution’s assessment rate depended upon the category to which it was assigned and certain adjustments specified by FDIC regulations, with institutions deemed less risky paying lower rates. Assessment rates (inclusive of possible adjustments) ranged from 2 ½ to 45 basis points of each institution’s total assets less tangible capital. The FDIC could increase or decrease the scale uniformly, except that no adjustment could deviate more than two basis points from the base scale without notice and comment rulemaking. The FDIC’s system represented a change, as required by the Dodd-Frank Act, from its prior practice of basing the assessment on an institution’s volume of deposits.

Effective July 1, 2016, the FDIC adopted changes that eliminated the risk categories. Assessments for most institutions are now based on financial measures and supervisory ratings derived from statistical modeling estimating the probability of failure within three years. In conjunction with the Deposit Insurance Fund reserve ratio achieving 1.5%, the assessment range (inclusive of possible adjustments) was reduced for most banks and savings banks to 1.5 basis points to 40 basis points.

The FDIC has authority to increase insurance assessments. Any significant increases would have an adverse effect on the operating expenses and results of operations of Lake Shore Savings. Management cannot predict what assessment rates will be in the future.

Insurance of deposits may be terminated by the FDIC upon a finding that an institution has engaged in unsafe or unsound practices, is in an unsafe or unsound condition to continue operations or has violated any applicable law, regulation, rule, order or condition imposed by the FDIC. We do not currently know of any practice, condition or violation that may lead to termination of our deposit insurance.

In addition to the FDIC assessments, the Financing Corporation (“FICO”) is authorized to impose and collect, with the approval of the FDIC, assessments for anticipated payments, issuance costs and custodial fees on bonds issued by the FICO in the 1980s to recapitalize the former Federal Savings and Loan Insurance Corporation. The bonds issued by the FICO began to mature in 2017 and will continue to mature through 2019. For the year ended December 31, 2017, Lake Shore Savings paid $22,000 related to the FICO bonds. For the quarter ended December 31, 2017, the annualized FICO assessment was equal to 0.54 of a basis point of total assets less tangible capital.

Prohibitions Against Tying Arrangements. Federal savings banks are prohibited, subject to some exceptions, from extending credit to or offering any other service, or fixing or varying the consideration for such extension of credit or service, on the condition that the customer obtain some additional service from the institution or its affiliates or not obtain services of a competitor of the institution.

Federal Home Loan Bank System. Lake Shore Savings is a member of the Federal Home Loan Bank System, which consists of twelve regional Federal Home Loan Banks. The Federal Home Loan Bank System provides a central credit facility primarily for member institutions. As a member of the Federal Home Loan Bank of New York, Lake Shore Savings is required to acquire and hold shares of capital stock in the Federal Home Loan Bank. As of December 31, 2017, Lake Shore Savings was in compliance with this requirement.

Federal Reserve System. The Federal Reserve Board regulations require savings banks to maintain noninterest-earning reserves against their transaction accounts, such as negotiable order of withdrawal and regular checking accounts. At December 31, 2017, the Bank was in compliance with these reserve requirements.

Other Regulations

Interest and other charges collected or contracted for by Lake Shore Savings are subject to state usury laws and federal laws concerning interest rates. Lake Shore Savings' operations are also subject to federal laws applicable to credit transactions, such as the:

- Truth-In-Lending Act, governing disclosures of credit terms to consumer borrowers;
- Real Estate Settlement Procedures Act, requiring that borrowers for one- to four-family residential real estate loans receive various disclosures, including good faith estimates of settlement costs, lender servicing and escrow account practices;
- Home Mortgage Disclosure Act, requiring financial institutions to provide information to enable the public and public officials to determine whether a financial institution is fulfilling its obligation to help meet the housing needs of the community it serves;
- Equal Credit Opportunity Act, prohibiting discrimination on the basis of race, creed or other prohibited factors in extending credit;
- Fair Credit Reporting Act, governing the use and provision of information to credit reporting agencies;
- Fair Debt Collection Act, governing the manner in which consumer debts may be collected by collection agencies;
- Truth in Savings Act; and
- rules and regulations of the various federal agencies charged with the responsibility of implementing such federal laws.

The operations of Lake Shore Savings also are subject to the:

- Right to Financial Privacy Act, which imposes a duty to maintain confidentiality of consumer financial records and prescribes procedures for complying with administrative subpoenas of financial records;
- Electronic Funds Transfer Act and Regulation E promulgated thereunder, which govern automatic deposits to and withdrawals from deposit accounts and customers' rights and liabilities arising from the use of automated teller

machines and other electronic banking services;

- Check Clearing for the 21st Century Act (also known as “Check 21”), which gives “substitute checks,” such as digital check images and copies made from that image, the same legal standing as the original paper check;
- Title III of The Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001 (referred to as the “USA PATRIOT Act”), which requires savings banks to, among other things, establish broadened anti-money laundering compliance programs, due diligence policies and controls to ensure the detection and reporting of money laundering. Such required compliance programs are intended to supplement existing compliance requirements, also applicable to financial institutions, under the Bank Secrecy Act and the Office of Foreign Assets Control Regulations; and

- The Gramm-Leach-Bliley Act, which places limitations on the sharing of consumer financial information by financial institutions with unaffiliated third parties. Specifically, the Gramm-Leach-Bliley Act requires all financial institutions offering financial products or services to retail customers to provide such customers with the financial institution's privacy policy and provide such customers the opportunity to "opt out" of the sharing of certain personal financial information with unaffiliated third parties.

Holding Company Regulation

General. Lake Shore, MHC and Lake Shore Bancorp are savings and loan holding companies within the meaning of the Home Owners' Loan Act. As such, Lake Shore, MHC and Lake Shore Bancorp are registered with the Federal Reserve Board and are subject to Federal Reserve Board regulations, examinations, supervision and reporting requirements. In addition, the Federal Reserve Board has enforcement authority over Lake Shore, MHC and Lake Shore Bancorp, and their non-bank subsidiaries. Among other things, this authority permits the Federal Reserve Board to restrict or prohibit activities that are determined to be a serious risk to the subsidiary savings institution. As federal corporations, Lake Shore, MHC and Lake Shore Bancorp are generally not subject to state business organization laws.

Permitted Activities. Pursuant to Section 10(o) of the Home Owners' Loan Act and Federal Reserve Board regulations and policy, a mutual holding company and a federally chartered mid-tier holding company such as Lake Shore Bancorp may engage in the following activities:

(i) investing in the stock of a savings institution;
(ii) acquiring a mutual savings bank through the merger of such savings institution into a savings institution subsidiary of such holding company or an interim savings bank subsidiary of such holding company;
(iii) merging with or acquiring another holding company, one of whose subsidiaries is a savings institution;
(iv) investing in a corporation, the capital stock of which is available for purchase by a savings institution under federal law or under the law of any state where the subsidiary savings institution or savings institutions share their home offices;
(v) furnishing or performing management services for a savings institution subsidiary of such company;
(vi) holding, managing or liquidating assets owned or acquired from a savings subsidiary of such company;
(vii) holding or managing properties used or occupied by a savings institution subsidiary of such company;
(viii) acting as trustee under deeds of trust;
(ix) any other activity (A) that the Federal Reserve Board, by regulation, has determined to be permissible for bank holding companies under Section 4(c) of the Bank Holding Company Act of 1956, unless the Federal Reserve Board, by regulation, prohibits or limits any such activity for savings and loan holding companies; or (B) in which multiple savings and loan holding companies were authorized (by regulation) to directly engage on March 5, 1987;
(x) any activity permissible for financial holding companies (if such status is elected by the Company) under Section 4(k) of the Bank Holding Company Act, including securities and insurance underwriting; and
(xi) purchasing, holding, or disposing of stock acquired in connection with a qualified stock issuance if the purchase of such stock by such savings and loan holding company is approved by the Federal Reserve Board.

If a mutual holding company acquires or merges with another holding company, the holding company acquired or the holding company resulting from such merger or acquisition may only invest in assets and engage in activities listed in (i) through (xi) above, and has a period of two years to cease any nonconforming activities and divest of any nonconforming investments.

The Home Owners' Loan Act prohibits a savings and loan holding company, including Lake Shore Bancorp and Lake Shore, MHC, directly or indirectly, or through one or more subsidiaries, from acquiring more than 5% of another savings institution or holding company thereof, without prior written approval of the Federal Reserve Board. It also prohibits the acquisition or retention of, with certain exceptions, more than 5% of a non-subsidiary company engaged in activities other than those permitted by the Home Owners' Loan Act; or acquiring or retaining control of an institution that is not federally insured. In evaluating applications by holding companies to acquire savings institutions, the Federal Reserve Board must consider the financial and managerial resources, future prospects of the company and institution involved, the effect of the acquisition on the risk to the insurance fund, the convenience and needs of the community and competitive factors.

The Federal Reserve Board is prohibited from approving any acquisition that would result in a multiple savings and loan holding company controlling savings institutions in more than one state, subject to two exceptions: (i) the approval of interstate supervisory acquisitions by savings and loan holding companies, and (ii) the acquisition of a savings institution in another state if the laws of the state of the target savings institution specifically permit such acquisitions. The states vary in the extent to which they permit interstate savings and loan holding company acquisitions.

Capital. Historically, savings and loan holding companies have not been subject to regulatory capital requirements. The Dodd-Frank Act, however, required the Federal Reserve Board to promulgate consolidated capital requirements for all depository institution holding companies that are no less stringent, both quantitatively and in terms of components of capital, than those applicable to institutions themselves. On January 29, 2015, the Federal Reserve Board revised its Small Bank Holding Company Policy Statement ("Policy Statement") as directed by federal legislation to generally raise the total consolidated asset limit for the exemption from holding company capital requirements from $500 million to $1 billion, and expand the scope of the Policy Statement to include savings and loan holding companies (SLHCs). In conjunction with these revisions, the Federal Reserve Board proposed changes to regulatory reports effective in 2015 to lessen the reporting burden on smaller institutions. As a result of these revisions, the MHC will be exempt from the regulatory capital requirements until consolidated assets exceed $1 billion.

Source of Strength. The Dodd-Frank Act extended the "source of strength" doctrine to savings and loan holding companies. The Federal Reserve Board has promulgated regulations implementing the "source of strength" policy that requires holding companies act as a source of strength to their subsidiary depository institutions by providing capital, liquidity and other support in times of financial stress. Federal Reserve Board policies also provide that holding companies should pay dividends only out of current earnings and only if the prospective rate of earnings retention by the holding company appears consistent with the organization's capital needs, asset quality and overall financial condition. The ability of a holding company to pay dividends may be restricted if a subsidiary bank becomes undercapitalized. These regulatory policies may affect the ability of a savings and loan holding company to pay dividends or otherwise make capital distributions.

Waivers of Dividends by Lake Shore, MHC. The Dodd-Frank Act requires federally-chartered mutual holding companies to give the Federal Reserve Board notice before waiving the receipt of dividends, and provides that in the case of “grandfathered” mutual holding companies, like Lake Shore, MHC, the Federal Reserve Board “may not object” to a dividend waiver if the board of directors of the mutual holding company waiving dividends determines that the waiver: (i) would not be detrimental to the safe and sound operation of the subsidiary savings bank; and (ii) is consistent with the board’s fiduciary duties to members of the mutual holding company. To qualify as a grandfathered mutual holding company, a mutual holding company must have been formed, issued stock and waived dividends prior to December 1, 2009. Lake Shore, MHC qualifies as a grandfathered mutual holding company. The Dodd-Frank Act further provides that the Federal Reserve Board may not consider waived dividends in determining an appropriate exchange ratio upon the conversion of a grandfathered mutual holding company to stock form. The Federal Reserve Board has issued an interim final rule that also requires, as a condition to waiving dividends, that each mutual holding company obtain the approval of a majority of the eligible votes of its members within 12 months prior to the declaration of the dividend being waived. Lake Shore, MHC solicited its members (depositors of Lake Shore Savings Bank) to vote on the proposal to waive the MHC's receipt of quarterly cash dividends aggregating up to $0.40 per share to be declared by the Company for the four quarters ending September 30, 2018. On February 7, 2018, the members approved the waiver of dividends. The Board of Directors of Lake Shore, MHC subsequently approved a dividend waiver in accordance with the regulations and submitted it to the Federal Reserve Board for their non-objection. As of March 9, 2018, Lake Shore, MHC received notice of the non-objection of the Federal Reserve Board to waive its right to receive dividends paid by the Company during the twelve months ending February 7, 2019. It is expected that Lake Shore, MHC will continue to waive future dividends, except to the extent dividends are needed to fund Lake Shore, MHC's continuing operations, subject to the ability of Lake Shore, MHC to obtain regulatory approval of its requests to waive dividends and its ability to obtain future member approval of dividend waivers. For more information, see Item 1A, "Risk Factors – Our ability to pay dividends is subject to the ability of Lake Shore Savings to make capital distributions to Lake Shore Bancorp and the waiver of dividends by Lake Shore, MHC."

Conversion of Lake Shore, MHC to Stock Form. Federal Reserve Board regulations permit Lake Shore, MHC to convert from the mutual form of organization to the capital stock form of organization (a "Conversion Transaction"). There can be no assurance when, if ever, a Conversion Transaction will occur, and the board of directors has no current intention or plan to undertake a Conversion Transaction. In a Conversion Transaction, a new stock holding company would be formed as the successor to Lake Shore Bancorp (the "New Holding Company"), Lake Shore, MHC's corporate existence would end, and certain depositors of Lake Shore Savings Bank would receive the right to subscribe for shares of the New Holding Company. In a Conversion Transaction, each share of common stock held by stockholders other than Lake Shore, MHC ("Minority Stockholders") would be automatically converted into a number of shares of common stock of the New Holding Company determined pursuant to an exchange ratio that ensures that Minority Stockholders own the same percentage of common stock in the New Holding Company as they owned in Lake Shore Bancorp immediately prior to the Conversion Transaction. The total number of shares of common stock held by Minority Stockholders after a Conversion Transaction also would be increased by any purchases by Minority Stockholders in the stock offering conducted as part of the Conversion Transaction. Under a provision of the Dodd-Frank Act applicable to Lake Shore, MHC, Minority Stockholders would not be diluted because of any dividends waived by Lake Shore, MHC (and waived dividends would not be considered in determining an appropriate exchange ratio), in the event Lake Shore, MHC converts to stock form.

Any Conversion Transaction would be subject to approvals by Minority Stockholders and members of Lake Shore, MHC.

Liquidation Rights. Each depositor of Lake Shore Savings has both a deposit account in Lake Shore Savings and a pro rata ownership interest in the net worth of Lake Shore, MHC based upon the deposit balance in his or her account. This ownership interest is tied to the depositor's account and has no tangible market value separate from the deposit account. This interest may only be realized in the unlikely event of a complete liquidation of Lake Shore Savings. Any depositor who opens a deposit account obtains a pro rata ownership interest in Lake Shore, MHC without any additional payment beyond the amount of the deposit. A depositor who reduces or closes his or her account (including reductions to pay for shares of common stock in the stock offering) receives a portion or all, respectively, of the balance in the deposit account but nothing for his or her ownership interest in the net worth of Lake Shore, MHC, which is lost to the extent that the balance in the account is reduced or closed.

In the unlikely event of a complete liquidation of Lake Shore Savings, all claims of creditors of Lake Shore Savings, including those of depositors of Lake Shore Savings (to the extent of their deposit balances), would be paid first. Thereafter, if there were any assets of Lake Shore Savings remaining, these assets would be distributed to Lake Shore Bancorp as Lake Shore Savings' sole stockholder. Then, if there were any assets of Lake Shore Bancorp remaining, depositors of Lake Shore Savings would receive those remaining assets, pro rata, based upon the deposit balances in their deposit account in Lake Shore Savings immediately prior to liquidation.

Federal Securities Laws

Lake Shore Bancorp common stock is registered with the Securities and Exchange Commission under the Securities Exchange Act of 1934, as amended. Lake Shore Bancorp is subject to the information, proxy solicitation, insider trading restrictions and other requirements under the Securities Exchange Act of 1934.

The registration under the Securities Act of 1933 of shares of the common stock in the stock offering does not cover the resale of the shares. Shares of the common stock purchased by persons who are not affiliates of Lake Shore Bancorp may be resold without registration. Shares purchased by an affiliate (generally officers, directors and principal shareholders) of Lake Shore Bancorp will be subject to the resale restrictions of Rule 144 under the Securities Act of 1933. If Lake Shore Bancorp meets the current public information requirements of Rule 144 under the Securities Act of 1933, each affiliate of Lake Shore Bancorp who complies with the other conditions of Rule 144, including those that require the affiliate's sale to be aggregated with those of other persons, would be able to sell in the public market, without registration, a number of shares not to exceed, in any three month period, the greater of 1% of the outstanding shares of Lake Shore Bancorp, or the average weekly volume of trading in the shares during the preceding four calendar weeks. Provision may be made in the future by Lake Shore Bancorp to permit affiliates to have their shares registered for sale under the Securities Act of 1933.

Sarbanes-Oxley Act of 2002

The Sarbanes-Oxley Act of 2002 addresses, among other issues, corporate governance, auditing and accounting, executive compensation, and enhanced and timely disclosure of corporate information. As directed by the Sarbanes-Oxley Act, the Chief Executive Officer and Chief Financial Officer of Lake Shore Bancorp, Inc. are required to certify that its quarterly and annual reports filed with the Securities and Exchange Commission do not contain any untrue statement of a material fact. The rules adopted by the Securities and Exchange Commission under the Sarbanes-Oxley Act have several requirements, including having these officers certify that: they are responsible for establishing, maintaining and regularly evaluating the effectiveness of internal control over financial reporting; they have made certain disclosures to its auditors and the audit/risk committee of the Board of Directors about internal control over financial reporting; and they have included information in the quarterly and annual reports about their evaluation and whether there have been changes in internal control over financial reporting or in other factors that could materially affect internal control over financial reporting. Lake Shore Bancorp, Inc. has existing policies, procedures and systems designed to comply with these regulations, and is further enhancing and documenting such policies, procedures and systems to ensure continued compliance with these regulations.

Item 1A. Risk Factors.

In analyzing whether to make or to continue an investment in the Company, investors should consider, among other factors, the following:

Risks Related To Our Business

Our loan portfolio includes loans with a higher risk of loss. We originate commercial real estate loans, commercial business loans, consumer loans, and residential real estate loans (including home equity loans) primarily within our market area. Our business strategy is to increase our commercial real estate and commercial business loan portfolios. Commercial real estate, commercial business, and consumer loans, which comprised in the aggregate 50.0% of our total loan portfolio at December 31, 2017, has increased from 43.1% of our total loan portfolio at December 31, 2016. These types of loans may expose a lender to greater credit risk than loans secured by residential real estate because the collateral securing these loans may not be sold as easily as residential real estate. In addition, commercial real estate and commercial business loans may also involve relatively large loan balances to individual borrowers or groups of borrowers. These loans also have greater credit risk than residential real estate for the following reasons:

- Commercial Real Estate Loans. Repayment is dependent upon income being generated in amounts sufficient to cover operating expenses and debt service.
- Commercial Business Loans. Repayment is generally dependent upon the successful operation of the borrower's business.
- Consumer Loans. Consumer loans (such as personal lines of credit) may or may not be collateralized with assets that provide an adequate source of payment for the loan due to depreciation, damage, or loss.

Deterioration in economic conditions in our market areas could affect the performance of our loan portfolio. Higher prices for businesses and consumers and high unemployment could negatively affect our loan portfolio, if business owners or consumers are not able to make loan payments. A downturn in the real estate market or our national or local economy could adversely affect the value of the properties securing the loans or revenues from our borrowers' businesses thereby increasing the risk of non-performing loans.

If our allowance for loan losses is not sufficient to cover actual loan losses, our earnings could decrease. Our loan customers may not repay their loans according to their terms and the collateral securing the payment of these loans may be insufficient to pay any remaining loan balance. We therefore may experience significant loan losses, which could have a material adverse effect on our operating results. A downturn in the real estate market or the local economy could exacerbate this risk. We review our allowance for loan losses on a monthly basis to ensure that it is funded adequately to cover any anticipated losses.

Material additions to our allowance for loan losses also would materially decrease our net income, and the charge-off of loans may cause us to increase the allowance for loan losses. 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 many of our loans. We rely on our loan quality reviews, our experience and our evaluation of economic conditions, among other factors, in determining the amount of the allowance for loan losses. 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 to our allowance. The Bank's increased focus on commercial loan originations has been one of the more significant factors we have taken into account in evaluating our allowance for loan losses and provision for loan losses. If we were to further increase the amount of commercial loans in our portfolio, we may decide to make increased provisions for loan losses. In addition, bank regulators periodically review our allowance for loan losses and may require us to increase our provision for loan losses or recognize further loan charge-offs, which may have a material adverse effect on our financial condition and results of operations.

Low demand for real estate loans may lower our profitability. Making loans secured by real estate, including one- to four-family and commercial real estate, is our primary business and primary source of revenue. If customer demand for real estate loans decreases, our profits may decrease because our alternative investments, primarily securities, generally earn less income than real estate loans. Customer demand for loans secured by real estate could be reduced due to weaker economic conditions, an increase in unemployment, a decrease in real estate values or an increase in interest rates. We experienced commercial loan growth during 2015 through 2017, especially in the Erie County market area, which had a positive impact on net interest income. If rates begin to rise, loan demand may slow down, and deposit expenses may increase, which could lower our profitability.

The results of our operations may be adversely affected by environmental conditions. During the course of making loans secured by real estate, we have acquired and may acquire in the future, property securing loans that are in default. There is a risk that we could be required to investigate and clean-up hazardous or toxic substances or chemical releases at such properties after acquisition in a foreclosure action, and that we may be held liable to a governmental entity or third parties for property damage, personal injury and investigation and clean-up costs incurred by such parties in connection with such contamination. In addition, the owner or former owners of contaminated sites may be subject to common law claims by third parties based on damages and costs resulting from environmental contamination emanating from such property. An environmental assessment of real estate securing commercial loans is completed prior to loan closing. This initial assessment may indicate a higher level of testing is needed. The borrower is then required to have further testing and complete any remedial action recommended. To date, we have not been subject to any environmental claims. There can be no assurance, however, that this will remain the case in the future.

We have opened new branches and may open additional new branches in the near future. Opening new branches reduces our short-term profitability due to one-time fixed expenses coupled with low levels of income earned by the branches until their customer bases are built. We may continue to expand through de novo branching. The expense associated with building and staffing new branches will significantly increase our non-interest expense, with compensation and occupancy costs constituting the largest amount of increased costs. Losses are expected from new branches for some time as the expenses associated with it are largely fixed and typically greater than the income earned as a branch builds up its customer base. There can be no assurance that a branch expansion strategy will result in increased earnings, or that it will result in increased earnings within a reasonable period of time. We expect that the success of a branching strategy will depend largely on the ability of our staff to market the deposit and loan products offered by us. The probability of opening a new branch will depend on available site locations, the economic environment and projected demand in targeted market areas.

The results of our operations may be adversely affected if asset valuations cause other-than-temporary impairment charges. We may be required to record future impairment charges on our investment securities or other assets if they suffer declines in value that are considered other-than-temporary. Numerous factors, including lack of liquidity for re-sales of certain investment securities, absence of reliable pricing information for investment securities, adverse changes in business climate, adverse actions by regulators, or unanticipated changes in the competitive environment could have a negative effect on our investment portfolio or other assets in future periods. If an impairment charge is significant enough it could have a material adverse effect on the Company's liquidity, its ability to pay dividends to shareholders, and its regulatory capital ratios.

Changes in interest rates could adversely affect our results of operations and financial condition. Our results of operations and financial condition are significantly affected by changes in interest rates. We derive our income mainly from the difference or "spread" between the interest earned on loans, securities and other interest-earning assets and interest paid on deposits, borrowings and other interest-bearing liabilities. In general, the larger the spread, the more we earn. When market rates of interest change, the interest we receive on our assets and the interest we pay on our liabilities will fluctuate. This can cause decreases in our spread and can adversely affect our income.

From an interest rate risk perspective, we have generally been liability sensitive, which indicates that our liabilities generally re-price faster than assets. Our earnings may be adversely impacted by an increase in interest rates because the majority of our interest-earning assets are long-term, fixed rate mortgage-related assets that will not re-price as long-term interest rates increase. As rates rise, we expect loan applications to decrease, prepayment speeds to slow down and the interest rate on our loan portfolio to remain static. Conversely, a majority of our interest-bearing liabilities have much shorter contractual maturities and are expected to re-price, resulting in increased interest expense. A significant portion of our deposits have no contractual maturities and are likely to re-price quickly as short-term interest rates increase. Therefore, in an increasing rate environment, our cost of funds is expected to increase more rapidly than the yields earned on our loan and securities portfolios.

In response to improving economic conditions, the Federal Reserve Board has slowly increased its federal funds target rate from a range of 0.00%-0.25% that was in effect for several years to the current range of 1.25%-1.50% as of December 31, 2017. It is projected that the Federal Reserve Board may increase the federal funds target rate three times during 2018, or an additional increase of 75 basis points. While we believe that modest interest rate increases will not significantly hurt our interest rate spread over the long term due to sufficient liquidity levels and the presence of adjustable-rate mortgage loans in our loan portfolio, interest rate increases may initially reduce our interest rate spread until such time as our loans and investments reprice to higher levels.

Changes in market interest rates could also reduce the value of our interest-earning assets including, but not limited to, our securities portfolio. In particular, the unrealized gains and losses on securities available for sale are reported, net of tax, in accumulated other comprehensive income which is a component of stockholders'

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equity. As such, declines in the fair value of such securities resulting from increases in market interest rates may adversely affect stockholders' equity.

In a decreasing interest rate environment, our earnings may increase or decrease. If long-term interest-earning assets do not re-price and interest rates on short-term deposits begin to decrease, earnings may rise. However, low interest rates on loan products may result in an increase in prepayments, as borrowers refinance their loans. If we cannot re-invest the funds received from prepayments at a comparable spread, net interest income could be reduced. Also, in a falling interest rate environment, certain categories of deposits may reach a point where market forces prevent further reduction in interest paid on those products. The net effect of these circumstances is reduced net interest income and possibly net interest rate spread.

The Bank's Asset-Liability Committee is responsible for balance sheet strategy and for monitoring the impact of changing interest rates on the Bank's operations and financial condition.

We are subject to certain risks with respect to liquidity. "Liquidity" refers to our ability to generate sufficient cash flows to support our operations and to fulfill our obligations, including commitments to originate loans, to repay our wholesale borrowings and other liabilities and to satisfy the withdrawal of deposits by our customers. Our primary source of liquidity is our core deposit base, which is raised through our retail branch network. Core deposits - consisting of savings and money market accounts, time deposits less than $250,000 and demand deposits - comprised approximately 94.5% of total deposits at December 31, 2017. Additional available unused sources of liquidity include borrowings from the FHLB, access to brokered deposits and lines of credit with correspondent banks. Liquidity is further provided by unencumbered, or unpledged, investment securities that totaled $63.4 million at December 31, 2017.

An inability to raise funds through deposits, borrowings, the sale of loans and/or investment securities and from other sources could have a substantial negative effect on our liquidity. Our most important source of funds consists of our customer deposits. Such deposit balances can decrease when customers perceive alternative investments, such as the stock market, as providing a better risk/return tradeoff. If customers move money out of bank deposits and into other investments, we could lose a relatively low cost source of funds, which would require us to seek wholesale funding alternatives in order to continue to grow, thereby increasing our funding costs and reducing our net interest income and net income.

Our access to funding sources in amounts adequate to finance our activities could be impaired by factors that affect us specifically or the banking industry in general. Factors that could detrimentally impact our access to liquidity sources include disruptions in the financial markets or negative views and expectations about the prospects for the banking industry.

Any decline in available funding could adversely impact our ability to continue to implement our strategic plan, including originate loans, invest in securities, meet our expenses, pay dividends to our shareholders or to fulfill obligations such as repaying our borrowings or meeting deposit withdrawal demands, any of which could have a material adverse impact on our liquidity, business, financial condition and results of operations.

We depend on our executive officers and key personnel to implement our business strategy and could be harmed by the loss of their services. We believe that our growth and future success will depend in large part upon the skills of our management team. The competition for qualified personnel in the financial services industry is intense, and the loss of our key personnel 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. Although we have an employment agreement with our President and Chief Executive Officer, that contains a non-compete provision, the loss of the services of one or more of our executive officers and key personnel could impair our ability to continue to develop our business strategy.

Our information systems may experience an interruption or breach in security. We rely heavily on communications and information systems to conduct our business. Any failure, interruption or breach in security of these systems could result in failures or disruptions in our customer accounts, general ledger, deposit, loan

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and other systems. There have been increasing efforts to breach data security at financial institutions through cyber-attacks. Recently, there have been several instances involving financial services and consumer-based companies reporting the unauthorized disclosure of customer information or the destruction or theft of corporate data. We may be unable to proactively address these types of security breaches or to implement adequate preventative measures because the techniques used to cause these breaches change frequently, often are not recognized until launched against a target and may originate from less regulated and remote areas throughout the world. While we have policies and procedures designed to prevent, limit or mitigate the effect of the possible failure, interruption or security breach of our information systems, there can be no assurance that any such failure, interruption or security breach will not occur or, if any does occur, that it will be adequately addressed. We periodically review our security protocols and, as necessary, add additional security measures to our computer systems and network infrastructure to mitigate the possibility of cybersecurity breaches, including firewalls and penetration testing. Additionally, we outsource our data processing to third parties. If the third party provider encounters difficulties or if we have difficulty in communicating with such third party, it will significantly affect our ability to adequately process and account for customer transactions, which would significantly affect our business operations. Furthermore, breaches of such third party's technology may also cause reimbursable loss to our consumer and business customers, through no fault of our own. Fraud attacks targeting customer-controlled devices, plastic payment card terminals, and merchant data collection points provide another source of potential loss, again through no fault of our own. The occurrence of any failures, interruptions or security breaches of information systems used to process customer transactions could damage our reputation, result in a loss of customer business, subject us to additional regulatory scrutiny, or expose us to civil litigation and possible financial liability, any of which could have a material adverse effect on our financial condition, results of operations and cash flows.

We regularly assess and test our systems, including back-up systems, but the risks are substantially escalating. As a result, cybersecurity and the continued enhancement of our controls and processes to protect our systems, data and networks from attacks, unauthorized access or significant damage remains a priority. The Company has developed a disaster recovery plan, which includes plans to maintain or resume operations in the event of an emergency, such as a power outage or natural disaster, and contingency plans in the event that operations or systems cannot be resumed or restored. The disaster recovery plan is periodically reviewed and updated, and components of the disaster recovery plan are periodically tested and validated. The Company also reviews and evaluates the disaster recovery programs of vendors which provide certain third-party systems that the Company considers critical. The Company has obtained insurance protection intended to cover losses due to network security breaches; there is no guarantee, however, that such insurance would cover all costs associated with any breach, damage or failure of our computer systems and network infrastructure.

We continually encounter technological change. The financial services industry is continually undergoing rapid technological change with frequent introductions of new technology-driven products and services. The effective use of technology increases efficiency and enables financial institutions to better serve customers and to reduce costs. Our future success depends, in part, upon our ability to address the needs of our customers by using technology to provide products and services that will satisfy customer demands, as well as to create additional efficiencies in our operations. Our largest competitors have substantially greater resources to invest in technological improvements. We may not be able to effectively implement new technology-driven products and services or be successful in marketing these products and services to our customers. Failure to successfully keep pace with technological change affecting the financial services industry could have a material adverse effect on us.

Our ability to grow may be limited. We intend to seek to expand our banking franchise, organically and by acquiring other financial institutions or branches and other financial service providers if the right opportunity occurs. However, we have no specific plans for expansion or acquisitions at this time. Our ability to grow through selective acquisitions of other financial institutions or branches will depend on successfully identifying, acquiring and integrating those institutions or branches. We cannot assure you that we will be able to generate organic growth or identify attractive acquisition candidates, make acquisitions on favorable terms or successfully integrate any acquired institutions or branches.

If we fail to maintain an effective system of internal control over financial reporting, we may not be able to accurately report our financial results or prevent fraud, and, as a result, shareholders and depositors could lose confidence in our financial reporting, which could adversely affect our business, the trading price of our stock and our ability to attract additional deposits. Section 404 of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act") and the rules and regulations of the Securities and Exchange Commission (the "SEC"), requires us to evaluate our internal control over financial reporting and provide an annual management report on our internal control over financial reporting, including, among other matters, management's assessment of the effectiveness of internal control over financial reporting. The Company has established a process to document and evaluate its internal controls over financial reporting in order to satisfy the Sarbanes-Oxley Act and related regulations, which require management consideration of the Company's internal controls over financial reporting on an annual basis. In this regard, management has dedicated internal resources and adopted a detailed work plan to (i) assess and document the adequacy of internal controls over financial reporting, (ii) take steps to improve control processes, where appropriate, (iii) validate through testing that controls are functioning as documented and (iv) maintain a continuous internal reporting and improvement process for internal control over financial reporting. The Company's management and Audit/Risk Committee have made the Company's compliance with Section 404 a high priority. The Company cannot be certain that these measures will ensure that the Company implements and maintains adequate controls over its financial processes and reporting in the future. Any failure to implement appropriate new or improved controls in response to changes in financial processes or reporting, or difficulties encountered in their implementation could harm the Company's operating results or cause the Company to fail to meets its reporting obligations. If the Company fails to correct any significant deficiencies in the design or operating effectiveness of internal controls over financial reporting or fails to prevent fraud, current and potential shareholders and depositors could lose confidence in the Company's financial reporting, which could harm its business and the trading price of its stock.

Our risk management framework may not be effective in mitigating risk and reducing the potential for significant losses. Our risk management framework is designed to minimize risk and loss to the Company. We seek to identify, measure, monitor, report and control our exposure to risk, including credit, interest rate, liquidity, price, operations, compliance, strategic, and reputation risks. We additionally segregate and assess information technology and human resource risks due to their complexity and over-arching risk profiles. While we use a diverse set of risk monitoring and mitigation techniques, these techniques are inherently limited because they cannot anticipate the existence or future development of currently unanticipated or unknown risks. Recent economic conditions and heightened legislative and regulatory scrutiny of the financial services industry, among other developments, have increased our level of risk. Accordingly, we could suffer losses as a result of our failure to properly anticipate and manage these risks.

Public shareholders do not exercise voting control over us. A majority of our voting stock is owned by Lake Shore, MHC. Lake Shore, MHC is controlled by its Board of Directors, which consist of those persons who are members of the Board of Directors of Lake Shore Bancorp and Lake Shore Savings. Lake Shore, MHC will determine the outcome of the election of the Board of Directors of Lake Shore Bancorp, and, as a general matter, controls the outcome of all matters presented to the shareholders of Lake Shore Bancorp for resolution by vote, except for matters that require a vote greater than Lake Shore, MHC's ownership interest. Consequently, Lake Shore, MHC, acting through its Board of Directors, is able to control the business and operations of Lake Shore Bancorp and may be able to prevent any challenge to the ownership or control of Lake Shore Bancorp by shareholders other than Lake Shore, MHC. There is no assurance that Lake Shore, MHC will not take actions that the public shareholders believe are against their interests.

A new accounting standard may require us to increase our allowance for loan losses and may have a material adverse effect on our financial condition and results of operations. The Financial Accounting Standards Board has adopted a new accounting standard that will be effective for the Company and the Bank for our first fiscal year after December 15, 2019. This standard, referred to as Current Expected Credit Loss, or CECL, will require financial institutions to determine periodic estimates of lifetime expected credit losses on loans, and recognize the expected credit losses as allowances for loan losses. This will change the current method of providing allowances for loan losses that are probable, which may require us to increase our allowance for loan losses, and to greatly increase the types of data we will need to collect and review to determine the appropriate level of the allowance for loan losses. Any increase in our allowance for loan losses or expenses incurred to determine the appropriate level of the allowance for loan losses may have a material adverse effect on our financial condition and results of operations.

Risks Related To Recent Developments And The Banking Industry Generally

Changes in laws and regulations and the cost of regulatory compliance with new laws and regulations may adversely affect our operations and/or increase our costs of operations. Lake Shore Savings, Lake Shore Bancorp and Lake Shore, MHC are subject to extensive regulation, supervision and examination by the OCC and the Federal Reserve Board. Such regulation and supervision governs the activities in which an institution and its holding companies may engage and are intended primarily for the protection of federal deposit insurance funds and the depositors and borrowers of Lake Shore Savings, rather than for our stockholders. Regulatory authorities have extensive discretion in their supervisory and enforcement activities, including the imposition of restrictions on our operations, the classification of our assets and determination of the level of our allowance for loan losses. These regulations, along with existing tax, accounting, securities, insurance and monetary laws, rules, standards, policies, and interpretations control the methods by which financial institutions conduct business, implement strategic initiatives and tax compliance, and govern financial reporting and disclosures. Any change in such regulation and oversight, whether in the form of regulatory policy, regulations, legislation or supervisory action, may have a material impact on our operations. Further, changes in accounting standards can be both difficult to predict and involve judgment and discretion in their interpretation by us and our independent accounting firms. These changes could materially impact, potentially even retroactively, how we report our financial condition and results of operations, and our interpretation of those changes.

The Dodd-Frank Act has significantly changed the bank regulatory structure and affects the lending, deposit, investment, trading and operating activities of financial institutions and their holding companies. The Dodd-Frank Act required various federal agencies to adopt a broad range of new implementing rules and regulations, and to prepare numerous studies and reports for Congress. The federal agencies have been given significant discretion in drafting the implementing rules and regulations. The Dodd-Frank Act created the Consumer Financial Protection Bureau with broad powers to supervise and enforce consumer protection laws. The Consumer Financial Protection Bureau has broad rule-making authority for a wide range of consumer protection laws that apply to all banks and savings institutions, including the authority to prohibit “unfair, deceptive or abusive” acts and practices. The Consumer Financial Protection Bureau has examination and enforcement authority over all banks with more than $10 billion in assets. Banks with $10 billion or less in assets continue to be examined for compliance with consumer laws by their primary bank regulators. The Dodd-Frank Act also weakened the federal preemption rules that have been applicable for national banks and federal savings banks, and gives state attorneys general the ability to enforce federal consumer protection laws.

Compliance with the Dodd-Frank Act and its implementing regulations and policies has resulted in changes to our business and operations, as well as additional costs, and has diverted management’s time from other business activities, which adversely affects our financial condition and results of operations.

Our ability to pay dividends is subject to the ability of Lake Shore Savings to make capital distributions to Lake Shore Bancorp and the waiver of dividends by Lake Shore, MHC. The value of Lake Shore Bancorp’s common stock is significantly affected by our ability to pay dividends to our public shareholders. Our long-term ability to pay dividends to our shareholders is based primarily upon the ability of the Bank to make capital distributions to Lake

Shore Bancorp, and also the availability of cash at the holding company level in the event earnings are not sufficient to pay dividends. Under OCC safe harbor regulations, the Bank may distribute capital to Lake Shore Bancorp in an amount not exceeding net income for the current calendar period and the prior two calendar years. Our ability to pay dividends and the amount of such dividends is also affected by the ability of Lake Shore, MHC, our mutual holding company and majority shareholder of Lake Shore Bancorp, to waive the receipt of dividends declared by Lake Shore Bancorp. Lake Shore, MHC waived its right to receive most of its dividends on its shares of Lake Shore Bancorp since its inception in 2006, with the exception of four dividends declared since 2006. The ability to waive dividends meant that Lake Shore Bancorp had more cash resources to pay dividends to its public shareholders than if Lake Shore, MHC accepted such dividends. Lake Shore, MHC is now required to obtain a waiver from the Federal Reserve Board allowing it to waive its right to dividends.

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Under Section 239.8(d) of the Federal Reserve Board's Regulation MM governing dividend waivers, a mutual holding company may waive its right to dividends on shares of its subsidiary if the mutual holding company gives written notice of the waiver to the Federal Reserve Board and the Federal Reserve Board does not object. For a company such as Lake Shore, MHC, that was formed, issued stock and waived dividends prior to December 1, 2009, the Federal Reserve Board may not object to a dividend waiver if such waiver would not be detrimental to the safety and soundness of the savings bank subsidiary and the board of directors of the mutual holding company expressly determines that such dividend waiver is consistent with the board's fiduciary duties to the members of the mutual holding company. Regulation MM also requires as a condition to waiving dividends, that a mutual holding company obtain the approval of a majority of the eligible votes of its members within 12 months prior to the declaration of the dividend being waived.

Lake Shore, MHC solicited its members (the depositors of Lake Shore Savings Bank) to vote on the proposal to waive dividends and on February 7, 2018, the members approved the waiver of dividends. The Board of Directors of Lake Shore, MHC subsequently approved a dividend waiver in accordance with the regulations and submitted it to the Federal Reserve Board for its non-objection. As of March 9, 2018, Lake Shore, MHC received notice of the non-objection of the Federal Reserve Board to waive its right to receive dividends paid by the Company during the twelve months ending February 7, 2019. It is expected that Lake Shore, MHC will continue to waive future dividends, except to the extent dividends are needed to fund Lake Shore, MHC's continuing operations, subject to the ability of Lake Shore, MHC to obtain regulatory approval of its requests to waive dividends and its ability to obtain future member approval of dividend waivers.

While Lake Shore, MHC is grandfathered for purposes of the dividend waiver provisions of Regulation MM and has complied with all additional requirements imposed, we cannot predict whether the Federal Reserve Board will grant a dividend waiver request and, if granted, there can be no assurance as to the conditions, if any, the Federal Reserve Board will place on future dividend waiver requests by grandfathered mutual holding companies such as Lake Shore, MHC. If Lake Shore, MHC is unable to waive the receipt of dividends, our ability to pay dividends to our shareholders may be substantially impaired and the amounts of any such dividends may be significantly reduced.

We are subject to more stringent capital requirements, which may adversely impact our return on equity, require us to raise additional capital or constrain us from paying dividends or repurchasing shares. In July 2013, the federal banking agencies approved a new rule that substantially amends the regulatory risk-based capital rules applicable to us. The final rule implements the "Basel III" regulatory capital reforms and changes required by the Dodd-Frank Act.

The final rule included new minimum risk-based capital and leverage ratios, which became effective for Lake Shore Savings on January 1, 2015 and refined the definition of what constitutes "capital" for purposes of calculating these ratios. The new minimum capital requirements are: (i) a new common equity Tier 1 capital ratio of 4.5%; (ii) a Tier 1 capital ratio of 6% (increased from 4%); (iii) a total capital ratio of 8% (unchanged from current rules); and (iv) a Tier 1 leverage ratio of 4%. The final rule also established a "capital conservation buffer" of 2.5%, and will result in the following minimum ratios: (i) a common equity Tier 1 capital ratio of 7.0%, (ii) a Tier 1 to risk-based assets capital ratio of 8.5%, and (iii) a total capital ratio of 10.5%. The new capital conservation buffer requirement was phased in beginning in January 2016 at 0.625% of risk-weighted assets and will increase each year until fully implemented in January 2019. For 2018, the capital conservation buffer will be 1.875% of risk-weighted assets. An institution is subject to limitations on paying dividends, engaging in share repurchases, and paying discretionary bonuses if its capital level falls below the buffer amount. These limitations will establish a maximum percentage of eligible retained income that can be utilized for such actions.

The application of more stringent capital requirements for Lake Shore Savings could, among other things, result in lower returns on equity, require the raising of additional capital, and result in regulatory actions such as the inability to pay dividends or repurchase shares if we were to be unable to comply with such requirements.

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Our local economy may affect our future growth possibilities. Our success significantly depends upon the growth in population, income levels, deposits and housing starts in our current market area, which is primarily located in Western New York, in particular within Erie and Chautauqua counties. Unlike many larger institutions, we are not able to spread the risks of unfavorable local economic conditions across a large number of diversified economies and geographic locations. If the communities in which we operate do not grow, or if prevailing economic conditions locally or nationally are unfavorable, our business may be negatively affected. A weak economy could lead to a deterioration of the credit quality of our loan portfolio and reduce our level of customer deposits, which in turn would hurt our business. Moreover, the value of real estate or other collateral that may secure our loans could be adversely affected.

Competition in our primary market area may reduce our ability to attract and retain deposits and originate loans. We operate in a competitive market for both attracting deposits, which is our primary source of funds, and originating loans. Our most direct competition for savings deposits has come from credit unions, commercial banks, savings banks and online banks. Particularly in times of extremely low or extremely high interest rates, we have faced additional significant competition for depositors from brokerage firms and other firms' short-term money market securities and corporate and government securities. Our competition for loans comes principally from commercial banks, savings banks, mortgage banking companies, credit unions, online retail mortgage lenders and other financial service companies. Competition for loan originations and deposits may limit our future growth and earnings prospects. Some of the institutions with which we compete have substantially greater resources than we have and may offer services that we do not provide. We expect competition to increase in the future as a result of legislative, regulatory and technological changes and the continuing trend of consolidation in the financial services industry. Our profitability will depend upon our continued ability to compete successfully in our market areas.

Changes in the Federal Reserve Board's monetary or fiscal policies could adversely affect our results of operations and financial condition. Our earnings will be affected by domestic economic conditions and the monetary and fiscal policies of the United States government and its agencies. The Federal Reserve Board has, and is likely to continue to have, an important impact on the operating results of banks through its power to implement national monetary policy, among other things, in order to curb inflation or combat a recession. The Federal Reserve Board affects the levels of bank loans, investments and deposits through its control over the issuance of United States government securities, its regulation of the discount rate applicable to member banks and its influence over reserve requirements to which member banks are subject. We cannot predict the nature or impact of future changes in monetary and fiscal policies.

Our stock price may be volatile due to limited trading volume. Our common stock is traded on the NASDAQ Global Market. However, the average daily trading volume in Lake Shore Bancorp's common stock has been relatively small, averaging less than 1,000 shares per day during 2017. As a result, trades involving a relatively small number of shares may have a significant effect on the market price of the common stock, and it may be difficult for investors to acquire or dispose of large blocks of stock without significantly affecting the market price.

We may be adversely affected by recent changes in U.S. tax laws and regulations. Changes in tax laws contained in the Tax Cuts and Jobs Act, which was enacted in December 2017, include a number of provisions that will have an impact on the banking industry, borrowers and the market for single-family residential real estate. Included in this legislation is a reduction of the Company's corporate income tax rate from 34% to 21% for tax years beginning after December 31, 2017. In addition, other changes include (i) a lower limit on the deductibility of mortgage interest on single-family residential mortgage loans, (ii) a limitation on interest deductions for home equity loans not used for home improvement, (iii) a limitation on the deductibility of business interest expense and (iv) a limitation on the deductibility of property taxes and state and local income taxes. These recent changes in the tax laws may have an adverse effect on the market for, and valuation of, residential properties, and on the demand for such loans in the future, and could make it harder for borrowers to make their loan payments. In addition, these recent changes may also have a disproportionate effect on taxpayers in states with high residential home prices and high state and local taxes, such as New York. If home ownership becomes less attractive, demand for mortgage loans could decrease. The value of the properties securing loans in our loan portfolio may be adversely impacted as a result of the changing economics of home ownership, which could require an increase in our provision for loan losses, which would reduce our profitability and could materially adversely affect our business, financial condition and results of operations.

Item 1B. Unresolved Staff Comments.

None.

Item 2. Properties.

We conduct our business through our corporate headquarters, administrative offices, and eleven branch offices. At December 31, 2017 the net book value of our buildings and premises was $8.4 million and the net book value of the computer equipment and other furniture and fixtures, and equipment at our offices totaled $1.0 million. For more information, see Note 6 and Note 9 in the Notes to our Consolidated Financial Statements.

Location	Leased or Owned	Original Date Acquired
Corporate Headquarters		
31 East Fourth Street		
Dunkirk, NY 14048	Owned	2003
Branch Offices:		
Chautauqua County branches		
128 East Fourth Street		
Dunkirk, NY 14048	Owned/Leased(1)	1926
30 East Main Street		
Fredonia, NY 14063	Owned	1996
1 Green Avenue, WE		
Jamestown, NY 14701	Owned/Leased(2)	1996
115 East Fourth Street		
Jamestown, NY 14701	Owned	1997
106 East Main Street		
Westfield, NY 14787	Owned/Leased(3)	1998
Erie County branches		
5751 Transit Road		
East Amherst, NY 14051	Owned	2003
3111 Union Road		
Orchard Park, NY 14127	Owned(4)	2003
59 Main Street		
Hamburg, NY 14075	Leased(5)	2005
3438 Delaware Avenue		
Kenmore, NY 14217	Owned	2008
570 Dick Road		
Depew, NY 14043	Leased(6)	2009
4950 Main Street		
Snyder, NY 14226	Owned	2012
Administrative Offices:		
125 East Fourth Street		
Dunkirk, NY 14048	Owned	1995
123 East Fourth Street		
Dunkirk, NY 14048	Owned	2001
415 Washington Avenue		
Dunkirk, NY 14048	Owned	2010

(1) The building is owned. Additional parking lot is leased. The lease expires in 2019.
(2) The building is owned. The land is leased. The lease expires in 2020.
(3) The building is owned. Additional parking lot is leased. The lease expires in 2018, but has an automatic one-year renewal option.
(4) This building was purchased in 2017 when lease expired. An addition to the building was also constructed during 2017.

(5) The lease expires in 2028.

(6) The lease expires in 2019, but has an option for a five-year renewal at expiration.

Item 3. Legal Proceedings.

At December 31, 2017, we are not involved in any pending legal proceedings other than routine legal proceedings occurring in the ordinary course of business. We believe that these routine legal proceedings, in the aggregate, are immaterial to our financial condition and results of operations.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity and Related Stockholder Matters.

Market Information

Lake Shore Bancorp, Inc. common stock trades on the Nasdaq Global Market under the symbol "LSBK". The table below shows the reported high and low sales prices and related dividend information of the common stock during the periods indicated.

	Sales Price		Dividend Information	
Period	High	Low	Amount Per Share	Date of Payment
2016				
First quarter	$ 13.60	$ 13.00	$ 0.07	March 10, 2016
Second quarter	15.10	12.97	0.07	May 20, 2016
Third quarter	13.60	13.00	0.07	August 22, 2016
Fourth quarter	16.59	13.36	0.07	November 21, 2016
2017				
First quarter	$ 16.15	$ 15.17	$ 0.08	March 13, 2017
Second quarter	15.90	15.41	0.08	May 24, 2017
Third quarter	16.00	15.64	0.08	August 24, 2017
Fourth quarter	17.40	15.80	0.08	November 20, 2017

The Board of Directors intends to review the payment of dividends quarterly and plans to continue to maintain a regular quarterly dividend, dependent upon our earnings, financial condition and other relevant factors. Refer to Part I, Item 1. “Business – Supervision and Regulation - Federal Banking Regulations - Capital Distributions” and “Business – Supervision and Regulation - Holding Company Regulation - Source of Strength and Waivers of Dividends by Lake Shore, MHC” and Part I, Item 1a. “Risk Factors – Risks Related to Recent Developments and The Banking Industry Generally” above for information on the possible restriction of dividend payments and MHC dividend waivers.

As of March 22, 2018, there were 772 stockholders of record (excluding the number of persons or entities holding stock in street name through various brokerage firms) of Lake Shore Bancorp, Inc. common stock.

The Company did not purchase any of its equity shares during the three months ended December 31, 2017 and has 67,401 shares that may yet be purchased under the existing stock repurchase plan that was approved by our Board of Directors on December 11, 2015.

Item 6. Selected Financial Data.

Our selected consolidated financial and other data is set forth below, which is derived in part from, and should be read in conjunction with, our audited consolidated financial statements and notes thereto as of December 31, 2017 and 2016 and for the years ended December 31, 2017, 2016 and 2015, beginning on page F-1 of this Form 10-K. Our selected consolidated financial and other data as of December 31, 2015, 2014 and 2013 and for the years ended December 31, 2014 and 2013 are from audited consolidated financial statements and notes not included in this Form 10-K.

	As of December 31,				
	2017	2016	2015	2014	2013
	(Dollars in thousands)				
Selected financial condition data:					
Total assets	$ 518,977	$ 489,174	$ 473,385	$ 487,471	$ 482,167
Loans, net	365,063	326,365	297,101	284,853	277,345
Securities available for sale	80,421	86,335	113,213	138,202	157,964
Federal Home Loan Bank stock	1,631	1,340	1,454	1,375	1,560
Total cash and cash equivalents	40,913	45,479	34,227	35,811	17,202
Total deposits	405,153	385,893	369,155	386,939	388,235
Short-term borrowings	-	-	-	-	11,650
Long-term debt	26,950	18,950	21,150	18,950	7,850
Total stockholders' equity	78,375	76,030	73,876	71,630	65,271
Allowance for loan losses	3,283	2,882	1,985	1,921	1,813
Non-performing loans	3,833	5,866	4,668	4,729	4,606
Non-performing assets	4,268	6,278	5,380	5,130	5,187

	For the year ended December 31,				
	2017	2016	2015	2014	2013
	(Dollars in thousands, except per share data)				
Selected operating data:					
Interest income	$ 19,408	$ 17,518	$ 17,587	$ 17,879	$ 18,614
Interest expense	2,630	2,294	2,757	3,348	3,556
Net interest income	16,778	15,224	14,830	14,531	15,058
Provision for loan losses	510	1,125	400	222	105

Net interest income after provision for loan losses	16,268	14,099	14,430	14,309	14,953
Total non-interest income	2,655	4,070	2,707	2,235	2,092
Total non-interest expense	14,360	13,879	13,083	12,819	12,334
Income before income taxes	4,563	4,290	4,054	3,725	4,711
Income taxes	1,185	775	716	567	968
Net income	$ 3,378	$ 3,515	$ 3,338	$ 3,158	$ 3,743
Basic earnings per common share	$ 0.55	$ 0.58	$ 0.57	$ 0.55	$ 0.66
Diluted earnings per common share	$ 0.55	$ 0.58	$ 0.56	$ 0.55	$ 0.65
Dividends declared per share	$ 0.32	$ 0.28	$ 0.28	$ 0.28	$ 0.28

	At or for the year ended December 31,				
	2017	2016	2015	2014	2013
Selected financial ratios and other data					
Performance ratios:					
Return on average assets	0.67%	0.74%	0.70%	0.65%	0.77%
Return on average equity	4.34%	4.58%	4.57%	4.58%	5.64%
Dividend payout ratio(1)	58.18%	48.28%	50.00%	50.91%	43.08%
Interest rate spread(2)	3.45%	3.29%	3.18%	3.06%	3.19%
Net interest margin(3)	3.61%	3.44%	3.34%	3.21%	3.34%
Efficiency ratio(4)	73.89%	71.93%	74.60%	76.46%	71.92%
Non-interest expense to average total assets	2.86%	2.91%	2.73%	2.63%	2.55%
Average interest-earning assets to average interest-bearing liabilities	128.07%	129.18%	125.03%	120.93%	119.39%
Book value per share(5)	$ 12.85	$ 12.49	$ 12.31	$ 11.96	$ 11.03
Capital ratios:					
Common Equity Tier 1 capital to risk-weighted assets(6)(7)	20.82%	22.23%	24.21%	n/a	n/a
Total risk-based capital to risk-weighted assets(6)	21.75%	23.15%	24.93%	25.71%	25.08%
Tier 1 risk-based capital to risk-weighted assets(6)	20.82%	22.23%	24.21%	24.95%	24.36%
Tangible capital to tangible assets(6)	14.40%	14.73%	14.31%	13.16%	12.75%
Tier 1 leverage (core) capital to adjustable tangible assets(6)	14.40%	14.73%	14.31%	13.16%	12.75%
Equity to total assets	15.10%	15.54%	15.61%	14.69%	13.54%
Asset quality ratios:					
Non-performing loans as a percent of total net loans	1.05%	1.80%	1.57%	1.66%	1.66%
Non-performing assets as a percent of total assets	0.82%	1.28%	1.14%	1.05%	1.08%
Allowance for loan losses as a percent of total net loans	0.90%	0.88%	0.67%	0.67%	0.65%
Allowance for loan losses as a percent of non-performing loans	85.65%	49.13%	42.52%	40.62%	39.36%
Other data:					
Number of full service offices	11	11	11	11	11
Number of full-time equivalent employees	111	106	109	108	109

(1)Represents dividends declared per share as a percent of diluted earnings per share.

(2)Represents the difference between the weighted-average yield on interest-earning assets and the weighted-average cost of interest-bearing liabilities for the year.

(3)Represents the net interest income as a percent of average interest-earning assets for the year.

(4)Represents non-interest expense divided by the sum of net interest income and non-interest income.

(5)Represents shareholders equity divided by outstanding shares.

(6)Represents the capital ratios of Lake Shore Savings Bank since Lake Shore Bancorp, Inc., as a savings and loan holding company with less than $1.0 billion in consolidated assets is not subject to formula-based capital requirements at the holding company level.

(7)Effective January 1, 2015, Lake Shore Savings Bank became subject to new capital requirements adopted by the OCC. The new requirements resulted in the creation of a new required ratio for Common Equity Tier 1 (“CET1”) capital.

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

This discussion and analysis reflects our consolidated financial statements and other relevant statistical data and is intended to enhance your understanding of our consolidated financial condition and results of operations. You should read the information in this section in conjunction with our consolidated financial statements and accompanying notes to the consolidated financial statements beginning on page F-1 of this Form 10-K, and the other statistical data provided in this Form 10-K.

Important Note Regarding Forward-Looking Statements

Certain statements in this annual report are “forward-looking” within the meaning of the Private Securities Litigation Reform Act of 1995, which statements generally can be identified by the use of forward-looking terminology, such as “may,” “will,” “expect,” “estimate,” “anticipate,” “believe,” “target,” “plan,” “project” or “continue” or the negatives thereof o variations thereon or similar terminology, and are made on the basis of management’s current plans and analyses of our business and the industry in which we operate as a whole. These forward-looking statements are subject to risks and uncertainties, including, but not limited to, economic conditions, competition, interest rate sensitivity and exposure to regulatory and legislative changes, and the other risks and uncertainties identified in Part I, Item 1A “Risk Factors.” These factors in some cases have affected, and in the future could affect, our financial performance and could cause actual results to differ materially from those expressed in or implied by such forward-looking statements. We do not undertake to publicly update or revise our forward-looking statements if future changes make it clear that any projected results expressed or implied therein will not be realized.

General Overview of the Company’s Activities and Risks

Our results of operations depend primarily on our net interest income, which is the difference between the interest income we earn on loans and investments and the interest expense we pay on deposits, borrowings and other interest-bearing liabilities. Net interest income is affected by the relative amounts of interest-earning assets and interest-bearing liabilities and the interest rates we earn or pay on these balances.

Our operations are also affected by non-interest income, such as service charges and fees and gains on the sales of securities and loans, our provision for loan losses and non-interest expenses which include salaries and employee benefits, occupancy and equipment costs, data processing, professional services, advertising and other general and administrative expenses.

Financial institutions like us, in general, are significantly affected by economic conditions, competition, and the monetary and fiscal policies of the federal government. Lending activities are influenced by the demand for and supply of housing, competition among lenders, interest rate conditions, and funds availability. Our operations and lending are principally concentrated in the Western New York area, and our operations and earnings are influenced by local economic conditions. Deposit balances and cost of funds are influenced by prevailing market rates on competing investments, customer preferences, and levels of personal income and savings in our primary market area. Operations are also significantly impacted by government policies and actions of regulatory authorities. Future changes in applicable law, regulations or government policies may materially impact the Company.

To operate successfully, we must manage various types of risk, including but not limited to, interest rate risk, credit risk, liquidity risk, operational and information technology risks, strategic risk, reputation risk and compliance risk.

A significant form of market risk for the Company is interest rate risk, as the Company's assets and liabilities are sensitive to changes in interest rates. Interest rate risk is the exposure of our net interest income to adverse movements in interest rates. Net interest income (the difference between interest earned on loans and investments and interest paid on deposits and borrowings) is our primary source of revenue and is affected by changes in interest rates as well as fluctuations in the level and duration of our assets and liabilities. In addition to directly impacting net interest income, changes in interest rates can also affect the amount of new loan originations, the ability of borrowers and debt issuers to repay loans and debt securities, the volume of loan repayments and refinancings, the flow and mix of deposits and the fair value of available for sale securities. In recent years, the Company has adjusted its strategies to manage interest rate risk by originating a greater volume of shorter-term, adjustable rate commercial real estate and commercial business loans and increasing its concentration of core deposits, which are less interest rate sensitive.

Credit risk is the risk to our earnings and stockholders' equity that results from customers, to whom loans have been made, and from issuers of debt securities in which the Company has invested, failing to repay their obligations. The magnitude of risk depends on the capacity and willingness of borrowers and debt issuers to repay and the sufficiency of the value of collateral obtained to secure the loans made or investments purchased. This risk is managed by policies approved by the Company's Board of Directors, review of compliance with the policies and periodic reporting and evaluation of loans or securities that are non-performing or demonstrate other characteristics of potential loss.

Both national and regional economic conditions may have a significant impact on the financial results of our banking operations. On a national level, due to improvements in the labor market and moderate economic expansion, the Federal Reserve has increased the Federal Funds rate by 100 basis points to 1.25%-1.50% during the 18 months ended December 31, 2017. The Federal Reserve has indicated that it will continue to assess both realized and expected economic conditions towards its dual mandates of maximum employment and a 2% inflation rate prior to future rate increases. At the December 2017 meeting, the Federal Reserve indicated that economic conditions will evolve, in a manner that will warrant gradual increases in the federal funds rate; and that the federal funds rate is likely to remain, for some time, below levels that are expected to prevail longer term. It is projected that the Federal Reserve Board may increase the federal funds target rate three times during 2018, resulting in a potential additional increase of 75 basis points. However, the Federal Reserve did indicate that the actual path of the federal funds rate will depend on the economic outlook based on data received. As a result, there is continued uncertainty about the timing of future rate increases.

Beginning in October 2017, the Federal Reserve began to gradually reduce its securities holdings by decreasing its reinvestment of the principal payments it receives. Such payments will be reinvested only to the extent that they exceed gradually rising caps on its maturing Treasury, agency debt and mortgage-backed securities. This action is expected to begin to reverse the downward pressure on long-term rates. However, uncertainty remains because the timing of future rate hikes and the pace of the Federal Reserve's balance sheet normalization can be modified upon review of economic conditions. We will continue to closely monitor the impact of the national and regional economy on our net interest margin, results of operations and critical risk areas, including interest rate risk and credit risk.

Management Strategy

Our Reputation. Our primary management strategy has been to retain our perceived image as one of the most respected and recognized community banks in Western New York with over 126 years of service to our community. Our management strives to accomplish this goal by continuing to emphasize our high quality customer service and financial strength.

Branding and Marketing. We currently operate eleven full-service branch offices throughout Western New York, where our branch personnel initiate and develop both consumer and commercial customer relationships in and around the surrounding market areas. Together with our online and mobile customer conveniences, we have the opportunity to provide individuals access to their banking needs, when, where, and however they want. As a true local bank, we pride ourselves on offering competitive products delivered with the individualized service our customers have come to expect. Our team members live and work right here in our communities, and can fully understand the specific challenges and opportunities our customers face daily, offering a real consultative approach for our customers. We continue to identify strategic opportunities that allow us to take advantage of the recent disruption in our market area as a result of consolidations in the banking industry. Staying true to our "Putting People First" mission continues to uniquely position us as a bank of choice in Western New York for over 125 years, with no plans of changing that.

Technology. An important strategic objective is to continue to evaluate and enhance the technology supporting our customer service. We are committed to making investments in technology and we believe that it represents an efficient way to deploy a portion of our capital. To this end, the Company has developed a five year plan for the implementation of cost effective and efficient digital services to meet our customer's technology needs, to focus on attracting new customers, and to improve our operational efficiencies. Although we remain committed to expanding our retail branch footprint whenever it makes strategic sense, we will be concentrating our near term efforts on expanding our digital footprint.

Our People. A large part of our success is related to customer service and customer satisfaction. Having employees who understand and value our clientele and their business is a key component to our success. We believe that our present staff is one of our competitive strengths, and thus the retention of such persons and our ability to continue to attract quality personnel is a high priority.

Lending. Our strategy is to grow our loan portfolio with emphasis on the origination of short-term adjustable rate commercial real estate, commercial business and home equity loans, while maintaining strong underwriting and asset quality. Historically, our lending portfolio has consisted predominantly of residential one- to four-family mortgage loans. At December 31, 2017 and 2016, we held $144.6 million and $150.0 million of residential one- to four-family mortgage loans (including loans to finance the construction of one- to four-family homes), respectively, which constituted 39.6% and 46.0% of our total loan portfolio, at such respective dates. In the past, we have sold low-yield long-term conforming fixed rate one- to four-family residential loans that we originated on the secondary market, as part of our interest rate risk strategy and asset/liability management, and may do so in the future, if it is deemed appropriate. We typically retain servicing rights when we sell one- to four-family residential mortgage loans.

Due to the interest rate risk inherent in holding long-term, fixed rate one- to four-family real estate loans in our portfolio in a potential rising interest rate environment, we have been strategically focused on increasing the originations of commercial real estate loans to finance the purchase of real property, which generally consists of developed real estate. We have also focused on commercial business lending to small businesses, including business installment loans, lines of credit and other commercial loans. These types of commercial loans are generally made at higher interest rates and for shorter terms than one- to four-family real estate loans, which reduces the Bank's interest rate risk. At December 31, 2017 and 2016, our commercial real estate loan portfolio (including loans to finance the construction of commercial real estate) consisted of loans totaling $153.6 million and $119.0 million, respectively, or 42.0% and 36.5%, respectively, of total loans. At December 31, 2017 and 2016, our commercial business loan portfolio consisted of loans totaling $27.6 million and $20.4 million, respectively, or 7.6% and 6.3%, respectively, of total loans. Other loan products offered to our customers include home equity lines of credit, construction loans and consumer loans, including automobile loans, overdraft lines of credit and share loans. At December 31, 2017 and 2016, our home equity loan portfolio consisted of loans totaling $38.1 million and $35.5 million, respectively, or 10.4% and 10.9%, of total loans, respectively.

Asset Quality. We remain committed to maintaining prudent underwriting standards and aggressively monitoring our loan portfolio to maintain asset quality. We introduce loan products only when we are confident that our staff has the necessary expertise to originate and administer such loans, and that sound underwriting and collection procedures are in place. Our goal is to continue to improve our asset quality through prudent underwriting standards and the diligence of our loan collection personnel. At December 31, 2017, our ratio of non-performing loans to total net loans was 1.05% and our ratio of allowance for loan losses to total net loans was 0.90% as compared to 1.80% and 0.88%, respectively, at December 31, 2016.

Investment Portfolio. Our investment policy is designed primarily to manage the interest rate sensitivity of our assets and liabilities, to generate a favorable return without incurring undue interest rate and credit risk, to complement our lending activities and to provide and maintain liquidity within established guidelines. We employ a third party financial advisor to assist us in managing our investment portfolio and developing balance sheet strategies.

At December 31, 2017 and 2016, we had $80.4 million and $86.3 million, respectively, invested in securities available for sale, the majority of which are agency collateralized mortgage obligation securities (“CMOs”), agency mortgage-backed securities and municipal securities. At December 31, 2017, we had a net $1.2 million unrealized gain on the investment portfolio.

Asset Liability Management. Our business consists primarily of originating one- to four-family residential real estate loans and commercial real estate loans secured by property in our market area and investing in residential mortgage backed securities, CMOs and municipal securities. One- to four-family residential real estate loans generally involve a lower degree of credit risk and carry a lower yield than commercial real estate and commercial business loans. The average maturity of residential real estate loans is longer than that for commercial loans. Our loans are primarily funded by core deposits (i.e. checking, savings and money market accounts) and time deposits (which typically mature within 2 years on average). As a result, we are exposed to interest rate risk, as our interest-bearing liabilities will mature or re-price more quickly than our interest-earning assets in a rising rate environment. A key part of our business strategy is to manage interest rate risk and reduce the exposure of our net interest income to changes in market interest rates. The Asset and Liability Committee of the Board of Directors is responsible for evaluating the interest rate risk inherent in our balance sheet, for determining the level of risk that is appropriate, given our business strategy, operating environment, capital, liquidity and performance objectives and for managing this risk consistent with the guidelines approved by the Board of Directors. Senior management monitors the level of interest rate risk and the Asset and Liability Committee meets at least quarterly to review the interest rate risk position.

We maintain substantial liquid resources to help mitigate interest rate risk. Although we plan to continue to originate one- to four-family residential mortgage loans going forward, we have been and intend to continue to increase our focus on the origination of commercial real estate loans and commercial business loans, which generally have adjustable rates, higher returns and shorter durations than one- to four-family residential real estate loans. As part of our asset liability strategy, we review the duration of assets on our balance sheet, and if necessary, we may sell loans or securities to help manage our interest rate risk.

Our strategy also involves managing interest expense. In recent years, we have decreased the amount of fixed rate time deposits and have concentrated on building lower-cost core deposits. We offer competitive rates on a variety of deposit products to meet the needs of our customers and to meet asset-liability goals. We also consider borrowed funds or derivatives, to supplement our deposit portfolio, as needed.

We are actively involved in managing our balance sheet through the direction of our Asset-Liability Committee and the assistance of a third party advisor. Recent economic conditions have underscored the importance of a strong balance sheet. We strive to achieve this through managing our interest rate risk and maintaining strong capital levels, putting aside adequate loan loss reserves and keeping liquid assets on hand. Diversifying our asset mix may improve the net interest margin and may also reduce the exposure of our net interest income and earnings to interest rate risk. We will continue to manage our interest rate risk by diversifying the type and maturity of assets in our loan and investment portfolios and monitoring the maturities in our deposit portfolio and borrowing facilities.

Critical Accounting Policies

It is management's opinion that accounting estimates covering certain aspects of our business have more significance than others due to the relative importance of those areas to overall performance, or the level of subjectivity required in making such estimates.

Allowance for loan losses. Management considers the accounting policy relating to the allowance for loan losses to be a critical accounting policy given the uncertainty in evaluating the level of the allowance for loan losses required for probable credit losses and the material effect that such judgments can have on the results of operations. Management's monthly evaluation of the adequacy of the allowance considers our historical loan loss experience, review of specific loans, current economic conditions, and such other factors considered appropriate to estimate loan losses. Management uses presently available information to estimate probable losses on loans; however, future additions to the allowance may be necessary based on changes in estimates, assumptions, or economic conditions. Significant factors that could give rise to changes in these estimates include, but are not limited to, changes in economic conditions in our local market areas, concentrations of risk and decline in local property values. The Company's determination as to the amount of its allowance for loan losses is subject to review by its bank regulators, which can require the establishment of additional loss allowances. Refer to Note 5 of the Notes to Consolidated Financial Statements for more information on the allowance for loan losses.

Investment Valuations. In management's opinion, the accounting policy relating to the valuation of investments is a critical accounting policy. We use a third party vendor to provide independent pricing of the securities in our investment portfolio, with the exception of three securities which are not actively traded. The third party vendor utilizes public quotations, third party dealer quotes and pricing models. For the three securities that are not actively trading, the Company utilizes discounted cash flow models to determine fair value pricing. Thus, the determination of fair value pricing on investments may require significant judgment or estimation, particularly when liquid markets do not exist for the item being valued. The use of different assumptions for these valuations could produce significantly different results which may have material positive or negative effects on the results of our operations. Refer to Note 13 of the Notes to Consolidated Financial Statements for more information on fair value.

Impairment of Investments. Management also considers the accounting policy relating to the impairment of investments to be a critical accounting policy due to the subjectivity and judgment involved and the material effect an impairment loss could have on the consolidated results of income. The credit portion of a decline in the fair market value of investments below cost deemed to be other-than-temporary ("OTTI") may be charged to earnings resulting in the establishment of a new cost basis for an asset. Management continually reviews the current value of its investments for evidence of OTTI. Refer to Note 3 of the Notes to Consolidated Financial Statements for more information on OTTI.

These critical policies and their application are reviewed periodically by our Audit/Risk Committee and our Board of Directors. All accounting policies are important, and as such, we encourage the reader to review each of the policies included in the notes to the Consolidated Financial Statements to better understand how our financial performance is reported.

Analysis of Net Interest Income

Net interest income represents the difference between the interest we earn on our interest-earning assets, such as commercial and residential mortgage loans and investment securities, and the expense we pay on interest-bearing liabilities, such as deposits and borrowings. Net interest income depends on both the volume of our interest-earning assets and interest-bearing liabilities and the interest rates we earn or pay on them.

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Average Balances, Interest and Average Yields. The following table sets forth certain information relating to our average balance sheets and reflects the average yield on interest-earning assets and average cost of interest-bearing liabilities, interest earned and interest paid for the years indicated. Such yields and costs are derived by dividing income or expense by the average balance of interest-earning assets or interest-bearing liabilities, respectively, for the years presented. Average balances are derived from daily balances over the years indicated. The average balances for loans are net of allowance for loan losses, but include non-accrual loans. The loan yields include net amortization of certain deferred fees and costs that are considered adjustments to yields. Interest income on securities does not include a tax equivalent adjustment for bank qualified municipal bonds.

	For the Year Ended December 31, 2017			For the Year Ended December 31, 2016			For the Year Ended December 31, 2015		
	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate
	(Dollars in thousands)								
Interest-earning assets:									
Interest-earning deposits & federal funds sold	$ 31,632	$ 270	0.85%	$ 31,810	$ 114	0.36%	$ 23,375	$ 22	0.09%
Securities(1)	80,536	2,448	3.04%	98,613	2,901	2.94%	129,043	3,813	2.95%
Loans	352,309	16,690	4.74%	312,359	14,503	4.64%	292,240	13,752	4.71%
Total interest-earning assets	464,477	19,408	4.18%	442,782	17,518	3.96%	444,658	17,587	3.96%
Other assets	37,527			34,366			33,903		
Total assets	$ 502,004			$ 477,148			$ 478,561		
Interest-bearing liabilities									
Demand & NOW accounts	$ 50,543	$ 63	0.12%	$ 45,584	$ 37	0.08%	$ 44,631	$ 39	0.09%
Money market accounts	86,517	283	0.33%	77,649	153	0.20%	75,879	167	0.22%
Savings accounts	53,874	31	0.06%	48,402	28	0.06%	44,340	30	0.07%
Time deposits	147,764								