

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, 2023

☐ 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 Exchange Act:

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common stock, par value \$0.01 per share	LSBK	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 ☒

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

Yes ☐ No ☒

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted 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 such files). Yes ☒ No ☐

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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input checked="" type="checkbox"/>	Smaller reporting company	<input checked="" type="checkbox"/>
Emerging growth company	<input type="checkbox"/>		

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☐

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. ☐

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

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

The aggregate market value of the voting stock held by non-affiliates of the registrant as of June 30, 2023 was \$18,262,409 based on the per share closing price as of June 30, 2023 on the Nasdaq Global Market for the registrant's common stock, which was \$10.77.

There were 5,684,784 shares of the registrant's common stock, \$.01 par value per share, outstanding at March 18, 2024.

DOCUMENTS INCORPORATED BY REFERENCE:

Portions of the registrant's Proxy Statement for the 2024 Annual Meeting of Stockholders

**Part of 10-K
where incorporated**

III

LAKE SHORE BANCORP, INC.
ANNUAL REPORT ON FORM 10-K
FOR THE FISCAL YEAR ENDED
DECEMBER 31, 2023
TABLE OF CONTENTS

ITEM	<u>PART I</u>	PAGE
<u>1</u>	<u>BUSINESS</u>	1
<u>1A</u>	<u>RISK FACTORS</u>	27
<u>1B</u>	<u>UNRESOLVED STAFF COMMENTS</u>	37
<u>1C</u>	<u>CYBERSECURITY</u>	37
<u>2</u>	<u>PROPERTIES</u>	39
<u>3</u>	<u>LEGAL PROCEEDINGS</u>	39
<u>4</u>	<u>MINE SAFETY DISCLOSURES</u>	39
<u>PART II</u>		
<u>5</u>	<u>MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES</u>	40
<u>6</u>	<u>RESERVED</u>	40
<u>7</u>	<u>MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS</u>	41
<u>7A</u>	<u>QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK</u>	52
<u>8</u>	<u>FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA</u>	52
<u>9</u>	<u>CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE</u>	52
<u>9A</u>	<u>CONTROLS AND PROCEDURES</u>	52
<u>9B</u>	<u>OTHER INFORMATION</u>	53
<u>9C</u>	<u>DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS</u>	53
<u>PART III</u>		
<u>10</u>	<u>DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE</u>	53
<u>11</u>	<u>EXECUTIVE COMPENSATION</u>	53
<u>12</u>	<u>SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS</u>	53
<u>13</u>	<u>CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE</u>	53
<u>14</u>	<u>PRINCIPAL ACCOUNTING FEES AND SERVICES</u>	54
<u>PART IV</u>		
<u>15</u>	<u>EXHIBITS AND FINANCIAL STATEMENT SCHEDULES</u>	55
<u>16</u>	<u>FORM 10-K SUMMARY</u>	56
	<u>SIGNATURES</u>	57

PART I

Item 1. Business.

Forward-Looking Statements

This annual report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements are based on Lake Shore Bancorp, Inc.'s current expectations regarding its business strategies, intended results and future performance. Words such as anticipates, expects, intends, plans, believes, estimates and variations of such words and expressions are intended to identify forward-looking statements. Such statements reflect management's current views of future events and operations. These forward-looking statements are based on information currently available as of the date of this report. It is important to note that these forward-looking statements are not guarantees of future performance and involve and are subject to significant risks, contingencies, and uncertainties, many of which are difficult to predict and are generally beyond our control. Potential risks and uncertainties that could cause our actual results to differ from those anticipated in any forward-looking statements include, but are not limited to, compliance with the Bank's Consent Order and an Individual Minimum Capital Requirement both issued by the Office of the Comptroller of the Currency, the Agreement with the Federal Reserve Bank of Philadelphia, data loss or other security breaches, including a breach of our operational or security systems, policies or procedures, including cyber-attacks on us or on our third party vendors or service providers, economic conditions, the effect of changes in monetary and fiscal policy, inflation, unanticipated changes in our liquidity position, climate change, increased unemployment, deterioration in the credit quality of the loan portfolio and/or the value of the collateral securing repayment of loans, reduction in the value of investment securities, the cost and ability to attract and retain key employees, regulatory or legal developments, tax policy changes, and our ability to implement and execute our business plan and strategy and expand our operations. These factors should be considered in evaluating forward-looking statements and undue reliance should not be placed on such statements, as our financial performance could differ materially due to various risks or uncertainties. 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

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 (63.96% as of December 31, 2023) 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 stockholders 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. The Company owns all of the issued and outstanding capital stock of Lake Shore Savings Bank.

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 commercial real estate loans, one- to four-family residential mortgage 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 earned on our loans and investment securities. Our primary sources of funds for lending and investments are deposits, borrowings, brokered deposits, 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, on the “Investor Relations” page under “About Us”. 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 of Western New York. As of the most recent United States Census Bureau population census as of July 1, 2022, Erie and Chautauqua Counties had an estimated combined population of approximately 1.1 million. 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 metropolitan area in the State of New York by population. The market area includes several 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 several colleges and universities, 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 experienced strong economic expansion prior to the onset of the COVID-19 pandemic, including 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. 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. There has also been an increased interest in innovative start-up companies, driven by the investment of 43North, which holds an annual competition enhanced by significant funding to attract innovative start-up companies to relocate to Buffalo, NY. This type of economic

development has had a positive impact on the small business and middle-market customers that we focus on and we believe we will be able to capitalize on opportunities created by this economic growth. Although the COVID-19 pandemic slowed down certain aspects of economic development and economic activity, the regional economy remains diversified, the housing market remains strong and various commercial and housing development projects continue to move forward. The lending opportunities in our market area remain dynamic and we believe that such activity will continue.

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 we serve 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, including a super regional bank which has its headquarters in Buffalo, NY, and 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 surrounding states. Many of these competitors have greater resources and offer additional services than we do. 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 commercial banks, savings banks, credit unions, 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. Competition for deposits and the origination of loans may limit the Company's growth and adversely impact its profitability in the future.

We expect competitive pressure to remain intense primarily due to technological advances and the continuing trend of consolidation in the financial services industry. Technological advances have lowered barriers to entry in our local market area by allowing banks to expand their geographic reach by providing services over the internet and have made it possible for non-depository institutions, including fintech companies, to offer products and services that have traditionally been provided by banks. We believe the primary factors in competing for deposits and loans is through personalized service, knowledge of the local market area and its economy, local decision making, technological convenience via mobile and online banking and active participation and support of the communities we serve.

Lending Activities

General. Our principal lending activity is the origination of fixed rate and adjustable rate mortgage loans collateralized by commercial and residential real estate primarily located within our market area. The Bank also originates commercial business loans, home equity loans and consumer loans. We retain the majority of loans that we originate. However, we may sell residential mortgage loans into the secondary market, with retention of servicing rights, in order to manage interest rate and liquidity risk when deemed appropriate. Additional efforts to manage interest rate risk include the origination of shorter-term, adjustable rate loans.

The loan portfolio composition table is set forth in Part II, Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this Report.

Loan Maturity. The following tables present the contractual maturity of our gross loans at December 31, 2023 and sets forth our fixed and adjustable rate loans at December 31, 2023, that are contractually due after December 31, 2024.

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 ⁽¹⁾	Home Equity	Commercial ⁽²⁾	Commercial	Consumer	Total
(Dollars in thousands)						
Amounts due in:						
One year or less	\$ 48	\$ 259	\$ 25,166	\$ 6,476	\$ 736	\$ 32,685
After one year through five years	1,878	2,920	67,686	4,366	394	77,244
After five year through 15 years	35,319	30,711	223,897	5,704	—	295,631
Beyond 15 years	134,760	17,979	237	—	—	152,976
Total	\$ 172,005	\$ 51,869	\$ 316,986	\$ 16,546	\$ 1,130	\$ 558,536

Interest rate terms on amounts due after one year:

Fixed rate	\$ 168,551	\$ 7,700	\$ 81,811	\$ 7,598	\$ 394	\$ 266,054
Adjustable rate	3,406	43,910	210,009	2,472	—	259,797
Total	<u>\$ 171,957</u>	<u>\$ 51,610</u>	<u>\$ 291,820</u>	<u>\$ 10,070</u>	<u>\$ 394</u>	<u>\$ 525,851</u>

(1) Includes one- to four-family construction loans.

(2) Includes commercial construction loans.

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

	For the Year Ended December 31,	
	2023	2022
	(Dollars in thousands)	
Total Loans:		
Balance outstanding at beginning of year	\$ 576,709	\$ 519,779
Originations:		
Real estate loans:		
Residential, one- to four-family ⁽¹⁾	12,496	39,991
Home equity	13,470	20,833
Commercial ⁽²⁾	26,400	88,180
Other loans:		
Commercial	3,560	7,607
Consumer	410	631
Total originations	56,336	157,242
Deduct:		
Principal repayments:		
Real estate loans	67,359	86,805
Commercial and consumer loans	7,029	11,909
Total principal repayments	74,388	98,714
Transfers to foreclosed real estate	60	216
Loan sales - SONYMA ⁽³⁾ & FHLMC ⁽⁴⁾	—	1,309
Loans charged off	61	73
Total deductions	74,509	100,312
Balance outstanding at end of year	\$ 558,536	\$ 576,709

(1) Includes one- to four-family construction loans.

(2) Includes commercial construction loans.

(3) State of New York Mortgage Agency.

(4) There were no loans sold during 2023. In 2022, we sold \$1.0 million 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.

Commercial Real Estate Loans. We remained focused on originating commercial real estate loans and have assembled a strong team of loan officers to grow this portfolio. As such, the Bank's primary lending activity is the origination of commercial real estate loans to finance the purchase of real property or to refinance real property. Real property generally consists of developed real estate, such as multi-family apartment complexes, office buildings, warehouses, hotels, restaurants, retail properties, mixed use properties, and self-storage units and is typically held as collateral for the loan. For the majority of our commercial real estate loan portfolio, the collateral is primarily located within the Bank's primary market area, Erie and Chautauqua Counties. At December 31, 2023, commercial real estate loans totaled \$300.5 million and represented 53.8% of the Bank's total loan portfolio. Commercial real estate loans that are collateralized by residential properties and multi-family apartment complexes made up 43.3% of the commercial real estate loan portfolio as of December 31, 2023 and totaled \$130.2 million. Commercial real estate loans that are collateralized by non-residential real estate amounted to \$170.3 million, or 56.7% of the commercial real estate loan portfolio at December 31, 2023. Of this amount, \$24.0 million, or 8.0% of the commercial real estate loan portfolio, related to the accommodation (hotel) and food services sector. In underwriting commercial real estate loans, consideration is given to historic and expected net operating income generated by the real estate, the age and condition of the collateral, the financial resources and income level of the borrower and any guarantors, current and projected occupancy levels, location of the property, and the borrower's business experience. Our commercial real estate loans are appraised by third party independent appraisers approved by the board of directors. Personal guarantees are typically obtained from commercial real estate borrowers.

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 25 years. Adjustable-rate loans are typically based on an index such as the prime rate or the FHLBNY advance rates with an added spread based on the type, size and risk of the loan. The rate is typically fixed for the first five years of the loan. Some adjustable-rate loans are subject to an interest rate floor. We typically lend up to a maximum loan-to-value ratio of 50% to 80% depending on the type and condition of the

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 and the strength of the personal guarantees of the owners. Fixed rate loans are typically subject to prepayment premiums if the loan is paid off within five years of origination and prior to the scheduled maturity.

Commercial real estate loans have larger balances and involve a greater degree of risk than one- to four-family residential loans. Of primary concern in multi-family and nonresidential real estate lending is the borrower's creditworthiness and the feasibility and cash flow potential of the project. Payments on loans secured by nonresidential properties often depend on the successful operation and management of the properties or underlying businesses. As a result, repayment of such loans may be subject to a greater extent, than residential real estate loans, to adverse conditions in the real estate market or the economy. To monitor cash flows on nonresidential properties, we require borrowers and/or loan guarantors to provide annual financial statements on larger multi-family and commercial real estate loans. In reaching a decision on whether to make a multi-family or nonresidential real estate loan, we consider the net cash flow of the project, the borrower's expertise, credit history and the value of the underlying property. In addition, we monitor the tenancy of the properties as to occupancy, lease rates, term of lease and tenant credit worthiness. 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 those prescribed by applicable federal statutes and regulations. We engage a third party to periodically conduct a credit review of the commercial real estate portfolio, including compliance with the Bank's underwriting standards and policy requirements. In addition, we engage a third party to perform property site inspections on an annual basis as required by our Commercial Loan Policy.

Commercial Construction. We originate loans primarily to established local developers to finance the construction of commercial and multi-family properties. We provide construction loans to local developers for the construction of one-to four-family residential developments. We also originate rehabilitation loans, enabling a borrower to partially or totally refurbish an existing structure, which are structured as construction loans and monitored in the same manner.

These loans typically have a construction period of up to 24 months or longer, 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. 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 the prime rate, plus a premium. A floor rate may also be established in conjunction with a variable rate loan. A minimum of interest only payments on disbursed funds must be made on a monthly basis during the construction period. At the end of the construction period, the loan may convert to a commercial real estate mortgage. At December 31, 2023, construction loans totaled \$16.4 million, or 2.9% of the total loan portfolio.

Construction loans can be affected by economic conditions and the value of the 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. The repayment of a construction loan is, to a large degree, dependent on the successful and timely completion of the construction of the subject property. Construction delays may further impair the borrower's ability to repay the loan. The Bank limits its risks during the construction period as disbursements are not made until the required work for each advance has been completed and a lien check has been performed.

One- to Four-Family Residential Mortgage Lending. At December 31, 2023, our one- to four-family residential loans (including residential construction loans) totaled \$172.0 million and represented 30.8% of the total loan portfolio. Our residential mortgage loan originations are obtained from customers, residents of our local communities or referrals from local real estate agents, brokers, attorneys, or builders. The majority of residential loans originated are fixed rate loans; although we do offer adjustable rate loan products to our customers. Lake Shore Savings has historically retained the majority of residential mortgage loans that it originates. This may increase Lake Shore Savings exposure to interest rate risk with the recent 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 has begun in recent years to sell long term, lower yielding, fixed rate residential mortgages at origination in the secondary market, with servicing retained.

One- to four-family residential mortgage loan originations are generally for terms up to 30 years; however, we do offer and have successfully originated loans with shorter terms of 10, 15, or 20 years. 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 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 \$726,200 loan balance during 2023) 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 100%, and up to 101% 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.

During 2023, there were no one- to four-family residential mortgage loans sold to the secondary mortgage market. We may offer loans through programs offered by the State of New York Mortgage Agency (“SONYMA”) which are originated for sale. 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, 2023, jumbo loans totaled \$5.7 million, or 3.3% of the one- to four-family residential mortgage portfolio. Jumbo loans carry greater risk than conforming loans as there are a limited number of potential buyers for this type of real estate which results in greater price volatility. As a result, these loan types are subject to more conservative underwriting requirements.

We originate one- to four-family mortgage loans on non-owner occupied properties that the borrower holds for investment purposes. These loans have a higher interest rate and shorter terms than loans for an owner-occupied property. The loans typically have a fixed interest rate, terms up to 25 years and a loan to value ratio up to 75%. As of December 31, 2023 these loans represented \$20.7 million or 12.0% of the one- to four-family residential mortgage portfolio.

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.

The retention of adjustable rate one- to four-family residential mortgage loans in our loan portfolio helps reduce our 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 residential 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 as our interest-bearing liabilities during a period of rapid increases in interest rates.

Lake Shore Savings originates construction-to-permanent loans for the purpose of construction of primary and secondary residences. The Bank issues a commitment and has one closing which encompasses both the construction phase and permanent financing. The construction phase is a maximum of twelve months and requires the borrower to make interest only payments at the rate stated in the loan agreement. The loan to value on construction-to-permanent loans cannot exceed 80.0% of the estimated completed value at the end of the project.

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 secured 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 resulting in stable collateral value and lower risk of loss.

Construction lending generally involves a greater degree of risk as the repayment of the loan is dependent on the successful and timely completion of the project. Lake Shore Savings completes inspections during the construction phase prior to any disbursements, which limits the Bank's risk. Construction delays may impair the borrower's ability to repay the loan.

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, 2023, home equity loans and lines of credit totaled \$51.9 million and represented 9.3% of the total loan portfolio. 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 product has interest rates tied to the prime rate and generally has 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 the 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 the 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, 2023, home equity loans and lines of credit where the Company does not hold the first mortgage represented 40.1% of the outstanding principal within our home equity loan portfolio. 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 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, or other commercial loan. At December 31, 2023, commercial business loans totaled \$16.5 million, or 3.0% 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/operating entity, projected cash flows and collateral value. Whenever possible, we collateralize these loans with a first lien on general business assets and a specific lien on the equipment being purchased and require personal guarantees from principals of the borrower. 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's operation. 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. Accordingly, the repayment of a commercial loan depends primarily on the creditworthiness of the borrower (and any guarantors), while liquidation of collateral is a secondary and may be an insufficient source of repayment. We engage a third party to conduct an annual credit review 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, 2023, consumer loans totaled \$1.1 million, or 0.2% of the total loan portfolio. Generally, the volume of consumer lending has declined as borrowers have opted for home equity lines of credit, which have lower interest rates. The largest component of our consumer loan portfolio are personal consumer loans and overdraft lines of credit. Our consumer loan portfolio also consists of vehicle loans, loans secured by certificates of deposit, secured and unsecured property improvement loans, and other secured loans.

Consumer loans 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.

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 some instances, we may purchase participation interests in loans where we are not the lead lender. In both of 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, 2023, our sold participations in commercial real estate and commercial business loans totaled \$6.0 million and \$242,000, respectively, all of which were collateralized by properties or business assets within our primary market area in Western New York. We may also purchase commercial real estate loan or commercial business loan participations in the future if deemed appropriate and at December 31, 2023, our purchased participations in commercial real estate and commercial business loans totaled \$6.4 million and \$194,000, respectively. All of the Bank's loan participations are collateralized by properties or business assets within our primary market area.

Loan Approval Procedures and Authority. Our lending policies are approved annually by our Board of Directors. Branch managers have the authority to originate home equity or consumer loans up to amounts approved by the Board of Directors. 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 \$726,200 require approval by the Internal Residential Loan Committee; loans between \$726,200 and \$1.0 million, require approval of the Internal Residential Loan Committee and designated bank officers or loan committee member. Any of the above-mentioned loans with non-standard terms such as high loan-to-value ratios will require additional approval levels up to and including approval by the Board of Directors. All non-commercial loans that are in excess of \$1.0 million, require approval from the Loan Committee of the Board of Directors. Director loans require approval from the Board of Directors.

Commercial Loan Officers have the authority to originate commercial real estate and commercial business loans up to amounts approved by the Board of Directors. Commercial loans with total one obligor credit in excess of \$100,000 and up to \$1.5 million require the approval of two members of the Internal Commercial Loan Committee, one of which must be a designated member of executive management. Commercial loans with total one obligor credit in excess of \$1.5 million and up to \$5.0 million require majority approval by the Board Loan Committee. Commercial loans with total obligor credit in excess of \$5.0 million require full Board approval. Loans with exceptions require a higher approval level.

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. An appraisal management firm, approved by the Board of Directors has been engaged 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 property and casualty 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, property and casualty 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 commercial real estate and one- to four-family residential mortgage loans primarily collateralized by property in Western New York, which historically has had stable property values, the maintenance of sound credit standards for new loan originations, our loan review 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, the Consumer Protection Act and the New York State Real Property Actions and Proceedings Law. 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.

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.

Non-performing Loans and Non-performing Assets. Loans are periodically reviewed for performance. Management individually evaluates loans when it is probable that at least a portion of the loan will not be collected in accordance with the original loan terms due to a deterioration in the financial condition of the borrower or in the value of the underlying collateral. When a loan is determined to be individually evaluated, the measurement of the loan is based on the present value of the expected future cash flows, or the fair value of the collateral, if the loan is collateral-dependent. If the measurement value is less than the loan balance, the loss is recorded against the allowance for credit losses. 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 management indicates that the loan is in the process of collection and is either guaranteed or well secured. When management designates loans on which we stop accruing interest income as non-accrual loans, we reverse outstanding interest income that was previously credited. We return a non-accrual loan to accrual status when factors indicating doubtful collection no longer exist and the borrower has performed for a period of at least six months.

Real estate acquired as a result of foreclosure is classified as foreclosed real estate until such time as it is sold. We record 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.

Loans modified due to borrowers experiencing financial difficulties occur when we grant borrowers loan modifications 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 modifications related to borrowers experiencing financial difficulty 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 loan modified due to a borrower experiencing financial difficulties 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. These loans are individually evaluated loans, which may result in specific reserves within the allowance for credit losses and subsequent charge-offs, if appropriate.

Refer to Part II, Item 7 "Management Discussion and Analysis of Financial Condition and Results of Operations" and Part IV, Financial Statements, Note 2 and Note 5 elsewhere in this report for additional details on nonperforming and individually evaluated loans.

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. Management closely monitors the quality of the loan portfolio and has established a loan review process designed to help grade the quality of the Company's loan portfolio. The credit quality grade helps management make a consistent assessment of each loan relationship's credit risk. Consistent with regulatory guidelines, the Company classifies loans and other assets considered of lesser quality. Such ratings coincide with the "Substandard", Doubtful", and "Loss" classifications used by federal regulators in their examination of financial institutions. A "Substandard" classification indicates that a loan has 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 “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. Loans classified as “Loss” are considered uncollectible and continuance as an asset of the Company is no longer warranted.

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. 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 outstanding loan balance against the allowance for credit 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. For further discussion on how management determines when a loan should be classified, refer to Note 5 in the consolidated financial statements located elsewhere in this report.

Allowance for Credit Losses on Loans and Unfunded Commitments. On January 1, 2023, the Company adopted ASU 2016-13 (Topic 326), which replaced the incurred loss methodology with CECL for financial instruments measured at amortized cost and other commitments to extend credit. The allowance for credit losses on loans and unfunded commitments is a valuation allowance for management’s estimate of expected credit losses in the loan portfolio and commitments to extend credit. The process to determine expected credit losses utilizes analytic tools and judgment and is reviewed on a quarterly basis. We maintain the allowance through (credit) provisions for credit losses that we charge to income. We charge losses on loans against the allowance for credit losses when we believe the collection of the loan is unlikely, and all possible avenues of repayment have been analyzed, including the potential of future cash flow, the value of the underlying collateral, and strength of any guarantors or co-borrowers.

Our evaluation of risk in maintaining the allowance for credit 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 current and future national and local economic conditions. There may be other factors that may warrant consideration in maintaining the allowance. Although our management believes that it has established and maintained the allowance for credit 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 credit 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 credit 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.

Refer to Note 5 in the consolidated financial statements located elsewhere in this report for more information on our individually evaluated loans.

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

	At December 31,					
	2023			2022		
	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
(Dollars in thousands)						
Real Estate Loans:						
Residential, one- to four-family ⁽¹⁾	\$ 532	8.2 %	30.8 %	\$ 411	5.8 %	30.5 %
Home equity	213	3.3 %	9.3 %	217	3.1 %	9.2 %
Commercial ⁽²⁾	5,231	81.0 %	56.8 %	5,746	81.3 %	56.7 %
	5,976	92.5 %	96.9 %	6,374	90.2 %	96.4 %
Other loans:						
Commercial	471	7.3 %	3.0 %	509	7.2 %	3.4 %
Consumer	16	0.2 %	0.1 %	47	0.7 %	0.2 %
	487	7.5 %	3.1 %	556	7.9 %	3.6 %
Total allocated	\$ 6,463	100.0 %	100.0 %	\$ 6,930	98.1 %	100.0 %
Total unallocated	—	0.0 %		135	1.9 %	
Balance at end of year	\$ 6,463	100.0 %		\$ 7,065	100.0 %	

⁽¹⁾ Includes one- to four-family construction loans.

⁽²⁾ Includes commercial construction loans.

For further discussion on how management evaluates its allowance for credit losses, refer to Note 5 in the consolidated financial statements located elsewhere in this report.

Investment Activities

General. The general objectives of the investment portfolio are to provide for the overall asset/liability management of the Bank. 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 on borrowings, 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. Our Board of Directors reviews and approves our investment policy on an annual basis. The Board of Directors has delegated primary responsibility for ensuring that the guidelines in the investment policy are followed to the Asset-Liability Committee. The board designates members of executive management with the authority to purchase securities within established plans and guidelines. All transactions are reviewed by the Asset/Liability Committee.

In establishing our investment strategies, we consider our interest rate sensitivity, the types of securities to be held, liquidity and other factors. 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.

The Company has classified all of its investments in debt securities as "available for sale." The debt securities are reported at fair value, and unrealized gains and losses on debt 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 are fixed-rate investment grade bonds issued primarily by municipalities in New York State, 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.

Fair values of available for sale securities are based on a market 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 third party data service provider.

We also have investments in equity securities, specifically Federal Home Loan Bank of New York (“FHLBNY”) stock, which must be held as a condition of membership in the Federal Home Loan Bank system. The level of investment is largely dependent on our level of borrowings from the FHLBNY. The investment in FHLBNY stock is considered restricted and is reported at cost on the consolidated statements of financial condition. The related changes in fair market value of equity securities are reported in other non-interest income on the consolidated statements of income.

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.

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 accordance with applicable regulations. Our review of our investment portfolio at December 31, 2023 resulted in two private-label asset-backed securities being classified, 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 two securities had an amortized cost of \$0 and an aggregate fair value of \$31,000 at December 31, 2023.

The Company assessed whether it intended to or would be more likely than not required to sell its available-for-sale securities in an unrealized loss position before the recovery of its amortized cost basis and concluded that no securities met this criteria. Furthermore, we considered whether the decline in fair value related to credit factors and concluded that no allowance for credit losses on available-for-sale securities was required as of December 31, 2023. Additionally, we concluded that no other than temporary impairment charges needed to be recorded during the year ended December 31, 2022. During the years ended December 31, 2023 and 2022, we recaptured \$7,000 and \$15,000 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.

Bank Owned Life Insurance. The Bank owns several Bank Owned Life Insurance (“BOLI”) policies totaling \$29.4 million and \$23.2 million at December 31, 2023 and 2022, respectively. The purpose of these policies is to offset the costs of supplemental employee retirement benefit (“SERP”) plans contractually obligated to members of management and non-employee directors. Refer to Note 11 in the notes to the consolidated financial statements beginning on page F-1 of this report for more information on the SERP plans. The lives of certain key Bank employees and non-employee directors are insured, and Lake Shore Savings Bank is the sole beneficiary and will receive any benefits upon the employee or non-employee’s death. The policies were purchased from various life insurance companies. The design of the plan allows the cash value of the policy to be designated as an asset of the Bank. The asset’s value will increase by the crediting rate, which is a rate set by each insurance company and is subject to change on a quarterly, semi-annual or annual basis. The growth of the value of the asset will be recorded in non-interest income on the consolidated statements of income. Because this is a life insurance product, current federal tax laws exempt the income from federal income taxes.

Bank owned life insurance is not secured by any government agency nor are the policies’ asset values or death benefits secured specifically by any collateral. The Bank has worked closely with its advisor to select insurance companies and the bond ratings and financial condition of the underlying insurance companies are monitored on a quarterly basis. The failure of one of these insurance companies could result in a significant loss to the Bank. Other risks include the possibility that the favorable tax treatment of the income could change, that the crediting rate will not increase in a manner comparable to market interest rates, or that this type of plan will no longer be permitted by the Bank’s regulators. This asset is considered

illiquid because, although the Bank may terminate the policies and receive the original premium plus all earnings at any time, such an action would require the payment of federal income taxes on all earnings since inception.

Sources of Funds

General. 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, along with cash flows from operations. Loan repayments are a relatively stable source of funds, while deposit inflows and outflows and loan prepayments are significantly influenced by general interest rates, pricing strategies and economic conditions.

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 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 small to medium-sized 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 branch offices and we rely primarily on paying competitive rates, service, and long-standing relationships with customers to attract and retain these deposits. We may also rely on brokers to obtain deposits for liquidity purposes. We are a participant in the IntraFi Network Deposits program. This program offers our depositors enhanced FDIC insurance coverage. On May 24, 2018, the Economic Growth, Regulatory Relief, and Consumer Protection Act of 2018 (the “EGRRCPA”) was signed into law and as a result reciprocal deposits obtained via the IntraFi Network Deposits program are generally not considered brokered deposits. At December 31, 2023 and 2022, we had \$12.9 million and \$8.1 million of depositor funds placed in the IntraFi Network Deposits program. At December 31, 2023, we had \$16.0 million of brokered time deposits while there were \$1.7 million of brokered time deposits at December 31, 2022.

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 to attract funds and to focus on the acquisition of lower cost core deposits as opportunities arise.

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, 2023 and 2022.

	Period to maturity at December 31, 2023				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	2023	2022
	(Dollars in thousands)					
Interest Rate Range						
0.49% and below	\$ 17,557	\$ 2,684	\$ 444	\$ 100	\$ 20,785	\$ 45,643
0.50% to 0.99%	12	1,091	3,426	2,168	6,697	18,330
1.00% to 1.99%	2,617	4,067	—	7	6,691	21,332
2.00% to 2.99%	6,677	13,286	4	—	19,967	52,109
3.00% to 3.99%	7,355	1,443	—	3,477	12,275	13,637
4.00% to 4.99%	91,640	295	—	1,803	93,738	1,907
5.00% to 5.99%	24,644	36,017	—	—	60,661	—
Total	<u>\$ 150,502</u>	<u>\$ 58,883</u>	<u>\$ 3,874</u>	<u>\$ 7,555</u>	<u>\$ 220,814</u>	<u>\$ 152,958</u>

At December 31, 2023 and 2022, time deposits with remaining terms to maturity of less than one year amounted to \$150.5 million and \$78.5 million, respectively.

At December 31, 2023 and 2022, we had \$75.7 million, or 12.8% of total deposits, and \$82.5 million, or 16.6% of total deposits, respectively, in uninsured deposits in excess of the FDIC insurance limit of \$250,000. At December 31, 2023, we had \$38.4 million in time deposits with balances of \$250,000 or more maturing as follows:

<u>Maturity Period</u>	<u>Amount</u> <u>(In thousands)</u>
Three months or less	\$ 5,014
Over three months through six months	10,716
Over six months to twelve months	7,793
Over twelve months	14,910
Total	<u>\$ 38,433</u>

Borrowings. The Company maintains borrowing arrangements in the form of lines of credit through two depository institutions. The Company may also obtain term borrowings from the FHLBNY. Our borrowings typically consist of a mix of short-term and long-term FHLBNY advances. At December 31, 2023 we had \$35.3 million of long-term debt from the FHLBNY. In comparison, we had \$12.6 million of short-term borrowings and \$25.0 million of long-term debt from the FHLBNY at December 31, 2022.

Additional information regarding our deposits and borrowings are included in Notes 7 and 8 in the notes to our consolidated financial statements beginning on page F-1 of this report. 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.

Subsidiary Activities

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

Employees and Human Capital Resources

Our core values of “Putting People First and *Helping our Customers, Energizing our Employees, Respecting our Stockholders and Serving our Communities*” begins with our Bank employees and their well-being. As a community bank, our employees are integral to the establishment of personal relationships with each of our customers, and as such are critical to the success of our Company.

As of December 31, 2023, Lake Shore Savings Bank employed 115 full-time employees and 2 part-time employees. Lake Shore Savings employees are not represented by a collective bargaining unit. Management believes that it has good relations with its employees.

Management encourages and supports the growth and development of all its employees by providing internal and external educational opportunities. Employees have the opportunity to participate in instructor led classroom training, third party webinars, seminars, conferences, and local leadership training groups, in an effort to increase their knowledge. Whenever possible, the Company seeks to fill its open positions through internal promotions and transfers from within the organization.

As part of our efforts to attract and retain employees, as well as support their health and well-being, we provide, in addition to competitive salaries, a comprehensive benefit package that provides health, dental, life, disability and other ancillary insurance benefits, as well as a generous paid time off policy. In addition, through our 401K, profit sharing and ESOP programs the Company facilitates the future financial well-being of its employees. Nearly all of our employees are stockholders in the Company through their participation in our Employee Stock Ownership Plan. Employee participation helps align employee and stockholder interests by providing stock ownership on a tax-deferred basis at no investment cost

to our associates. These benefits, when combined with incentive compensation and bonus programs, serve as rewards for performance and as retention vehicles.

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. 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 regulated, to a lesser extent, by the FDIC with respect to insurance of deposit accounts and the Federal Reserve Board, with respect to the payment of dividends and other matters. The regulation and supervision by these government agencies 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. 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.

Certain of the regulatory requirements that are applicable to Lake Shore Savings, Lake Shore Bancorp and Lake Shore, MHC are described below. This description of statutes, regulations and other documents is not intended to be a complete explanation of such statutes, regulations and other documents 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, regulations and other documents.

Consent Order

Effective as of February 9, 2023, the Bank and the OCC entered into a Consent Order (the "Order"). The Order replaces the prior Agreement between the Bank and the OCC dated July 13, 2022 (the "Written Agreement"), which has been terminated in connection with the entry into the Order. The Order provides, among other things, that the Bank will take the following actions within specified time frames as set forth in the Order:

- create a compliance committee to monitor and oversee the Bank's compliance with the Order and submit monthly reports to the Board of Directors of the Bank and the OCC;
 - develop, adopt, implement, and thereafter adhere to a program for corporate governance and Board oversight of the Bank's operation and structure;
 - establish, and review at least annually, the objectives by which senior executive officers', as well as the Chief Technology Officer's, the Information Security Officer's, and the Bank Secrecy Act ("BSA") Officer's, effectiveness will be measured and prepare an annual written performance appraisal for each Bank senior executive officer evaluating the performance of such objectives;
 - ensure that the Bank has competent management in place, review the capabilities, experience, qualifications and performance of the Bank's management, including, but not limited to, the Chief Executive Officer, Chief Operating Officer, Chief Technology Officer, Information Security Officer and BSA Officer, and the Board will determine whether management changes should be made;
 - if an officer will continue in his or her position, but the Board determines the officer's depth of skills needs improvement, it will develop and implement a written program to improve the officer's supervision and management of the Bank;
 - submit to the OCC for review and prior written determination of no supervisory objection an acceptable written strategic plan for the Bank covering at least a three-year period;
 - submit to the OCC for review an acceptable, comprehensive, written internal audit program that adequately assesses controls and operations to allow the Board and management to understand the sufficiency of the Bank's internal controls program;
-

- develop, adopt and implement a written program to effectively assess and manage the Bank's information technology ("IT") activities, commensurate with the level of risk and complexity of the Bank's IT activities, subject to review and prior written determination of no supervisory objection by the OCC;
- develop, adopt and implement a written information security program that includes administrative, technical and physical safeguards to ensure the security and confidentiality of customer information, subject to review and prior written determination of no supervisory objection by the OCC;
- adopt and implement the written automated clearing house risk management program previously given no supervisory objection by the OCC in connection with the Written Agreement;
- analyze the current BSA/AML risk profile and strategic direction of the Bank to determine the skills, experience, and expertise required of the Bank's BSA Officer and develop a comprehensive job description detailing all the requirements and responsibilities of the BSA Officer role with such appointment of a BSA Officer subject to OCC non-objection;
- ensure that the Bank's BSA Department maintains sufficient personnel with requisite expertise, training, skills, and authority to ensure the safe and sound operation of the Bank;
- develop, adopt, implement and ensure that the BSA Officer and any supporting staff receive training, and thereafter ensure the Bank's adherence to a written system of internal controls reasonably designed to provide for ongoing compliance with BSA regulatory requirements, including appropriate suspicious activity monitoring and reporting;
- ensure that Bank management develops, implements, and thereafter maintains adherence to an enhanced written risk-based program of internal controls and processes to ensure compliance with OCC regulations to file suspicious activity reports ("SARs");
- submit to the OCC for prior written determination of no supervisory objection, the name and qualifications of a proposed independent, third-party consultant to conduct a look-back review of certain medium and high risk activity over a six-month period and provide a written report on the Bank's SARs monitoring, including a proposed scope and timeline for completion of the engagement;
- revise, develop, adopt, implement, and thereafter ensure the Bank's adherence to expanded account opening policies and procedures for all accounts that pose greater than normal risk for compliance with the BSA;
- develop, adopt, implement, and thereafter ensure the Bank's adherence to procedures for periodically reviewing, testing, and updating the Bank's BSA/AML model risk assessments; and
- develop, adopt, implement, and thereafter ensure the Bank's adherence to requirements for the periodic independent validation of the Bank's BSA/AML systems to ensure the system is detecting potentially suspicious activity.

The foregoing description of the Order is qualified in its entirety by reference to the full Order which was included in a Form 8-K filed on February 15, 2023 with the Securities and Exchange Commission.

Troubled Condition Status

The Bank has been designated as being in "Troubled Condition" under the rules and regulations of the OCC. As a result of this designation, the Bank must notify the OCC at least 30 days prior to the addition or replacement of a board member, or the employment or change in responsibilities of anyone who is, who will become, or performs the duties of a senior executive officer. Furthermore, the Bank must file an application with, and receive the consent of, the OCC with the concurrence of the FDIC, prior to the Bank entering into any agreement to pay and prior to making certain severance payments to our directors, officers and employees.

Individual Minimum Capital Requirement

Pursuant to an Individual Minimum Capital Requirement, the Bank has been directed by the OCC to maintain a Tier 1 Leverage capital ratio of 10% and a Total Risk-Based capital ratio of 13%. In order to be considered "well-capitalized" by the OCC, a savings bank must maintain a Tier 1 Leverage capital ratio of 5% and a Total Risk-Based capital ratio of 10%. At December 31, 2023, the Bank's Tier 1 Leverage capital ratio was 12.68% and its Total Risk-Based capital ratio was 17.77% and accordingly the Bank was in compliance with its Individual Minimum Capital Requirement and was considered well-capitalized.

Agreement with the Federal Reserve Bank of Philadelphia

On June 28, 2023 Lake Shore, MHC and Lake Shore Bancorp, Inc. the parent savings and loan holding companies of Lake Shore Savings Bank, entered into a written agreement (the “Agreement”) with the Federal Reserve Bank of Philadelphia (the “Reserve Bank”), the companies’ regulator. The Agreement provides, among other things, that the companies take appropriate steps to fully utilize the companies’ financial and managerial resources to serve as a source of strength to the Bank, including, but not limited to, taking steps to ensure that the Bank complies with the Consent Order and not, directly or indirectly, declare or pay dividends, increase or guarantee any debt without prior approval. We expect that our non-interest expenses will continue at their increased levels as a result of the Agreement and the Order, which may adversely affect our financial performance.

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 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.

Examinations and Assessments. Lake Shore Savings Bank is primarily supervised by the OCC, and as such is required to file reports with and is subject to periodic examination by the OCC. Lake Shore Savings Bank is also required to pay assessments to the OCC to fund the agency’s operations.

Capital Requirements. Federal regulations require a federal savings bank to meet certain minimum capital standards. The minimum capital standards consist of a common equity Tier 1 (“CET1”) capital ratio of 4.5% of risk-weighted assets, a uniform leverage ratio of 4%, a Tier 1 capital to risk-weighted assets ratio of 6% of risk-weighted assets and a total capital ratio of at least 8% of risk-weighted assets. 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 Bank is also required to meet an Individual Minimum Capital Requirement as described above. The regulatory standards require 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 when applying the general rule. Additional restraints are also imposed on the inclusion in regulatory capital of mortgage-servicing assets, deferred tax assets and minority interests.

Capital definitions include:

- *Common equity Tier 1 capital* is generally defined as common stockholders’ equity, including retained earnings but excluding accumulated other comprehensive income.
 - *Tier 1 capital* is generally defined as Common Equity Tier 1 capital and Additional Tier 1 capital.
 - *Additional Tier 1 capital* generally includes certain noncumulative perpetual preferred stock and related surplus and minority interests in equity accounts of consolidated subsidiaries.
 - *Total capital* includes Tier 1 capital and Tier 2 capital.
 - *Tier 2 capital* is comprised of capital instruments and related surplus meeting specific requirements, and may include cumulative preferred stock, long-term perpetual preferred stock, mandatory convertible securities, subordinated debt and intermediate preferred stock. Also included in Tier 2 capital is the allowance for loan and lease losses limited to a maximum of 1.25% of risk-weighted assets and, for institutions that have not exercised an opt-out election regarding the treatment of Accumulated Other Comprehensive Income (“AOCI”), up to 45% of net unrealized gains on available-for-sale equity securities with readily determinable fair market values. Lake Shore Savings has exercised this one time opt-out election and does not include AOCI in its regulatory capital when applying the general rule.
-

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 assigned by federal regulations based on the risks believed inherent in the type of asset. The capital requirements assign a higher risk weight to asset categories believed to present a great risk. For example, a risk weight of 0% is assigned to cash and U.S. government securities, a risk weight of 50% is generally assigned to prudently underwritten first lien one to four family residential mortgages, a risk weight of 100% is assigned to commercial and consumer loans, a risk weight of 150% is assigned to certain past due loans and a risk weight of between 0% and 600% is assigned to permissible equity interests, depending on certain specified factors.

The regulations limit a banking organization's capital distributions and certain discretionary bonus payments if the banking organization does not hold a "capital conservation buffer" consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets in addition to the amount necessary to meet its minimum risk-based capital requirements.

Notwithstanding the foregoing, pursuant to the EGRRCPA, the OCC finalized a rule effective January 2020 that established a minimum community bank leverage ratio (tier 1 capital to average consolidated assets) of 9% for institutions under \$10 billion in assets. An institution may elect to utilize the community bank leverage ratio in lieu of the general applicable risk-based capital requirements under Basel III. Such institutions that meet the community bank leverage ratio and certain other qualifying criteria will automatically be deemed to be well-capitalized.

Effective January 1, 2020, the Bank elected to opt in and utilize the community bank leverage ratio framework on its quarterly call report. An institution that temporarily ceases to meet any qualifying criteria is provided with a two-quarter grace period to again achieve compliance. Failure to meet the qualifying criteria within the grace period or maintain a leverage ratio of 9% requires the institution to comply with the generally applicable capital requirements.

At December 31, 2023, Lake Shore Savings' capital exceeded the minimum requirement of the community bank leverage ratio with a ratio of 12.68% and was considered to be well-capitalized.

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 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 or if applicable, a community bank leverage ratio of 9.0%);
- 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." 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, 2023, Lake Shore Savings met the criteria for being considered “well-capitalized.”

Capital Distributions. Federal regulations govern capital distributions by a federal savings bank, which include cash dividends, stock repurchases and other transactions charged to the capital account.

Among other requirements, every federal savings bank in the mutual holding company structure must file an application with the OCC prior to paying a dividend or making a capital distribution.

Every federal savings bank that is a subsidiary of a holding company must 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 OCC and the Federal Reserve Board may disapprove an application or notice 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.

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.

Loans to One Borrower. Generally, a federal savings bank may not make a loan or extend credit to a single borrower 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, 2023, 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 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 made noncompliance with the QTL test potentially subject to agency enforcement action for violation of law. At December 31, 2023, Lake Shore Savings Bank opted to utilize the HOLA QTL test and satisfied the requirements of this test for the entire 12-month period.

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 total liabilities of 12% or greater.

Refer to Part II, Item 7 “Management Discussion and Analysis – Liquidity and Capital Resources” elsewhere in this report for additional details on liquidity.

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 an “outstanding” Community Reinvestment Act rating in its most recent federal examination.

On October 24, 2023, the OCC and the other federal banking agencies issued a final rule to strengthen and modernize the CRA regulations. Under the final rule, banks with assets of at least \$600 million as of December 31 in both of the prior two calendar years and less than \$2 billion as of December 31 in either of the prior two calendar years will be an “intermediate bank.” The agencies will evaluate intermediate banks under the Retail Lending Test and either the current community development test, referred to in the final rule as the Intermediate Bank Community Development Test, or, at the Bank’s option, the Community Development Financing Test. The applicability date for the majority of the provisions in the CRA regulations is January 1, 2026, and additional requirements will be applicable on January 1, 2027.

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% stockholders, 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, 2023, Lake Shore Savings is in compliance with Regulation O.

Cybersecurity. In addition to the provisions in the Gramm-Leach-Bliley Act relating to data security, the Company and its subsidiaries are subject to many federal and state laws, regulations and regulatory interpretations which impose standards and requirements related to cybersecurity. For example, federal regulatory statements regarding cybersecurity indicates that financial institutions should design multiple layers of security controls to establish lines of defense and to ensure that risk management processes also address the risk posed by compromised customer credentials, including security measures to reliably authenticate customers accessing internet-based services of the financial institution. Additionally, the statements indicate that a financial institution's management is expected to maintain sufficient business continuity planning processes to ensure the rapid recovery, resumption and maintenance of the institution's operations after a cyber-attack involving destructive malware. A financial institution is also expected to develop appropriate processes to enable recovery of data and business operations and address rebuilding network capabilities and restoring data if the institution or its critical service providers fall victim to this type of cyber-attack. Financial institutions that fail to observe this regulatory guidance on cybersecurity may be subject to various regulatory sanctions, including financial penalties.

In November 2021, the federal bank regulatory agencies issued a final rule requiring banking organizations to notify their primary federal regulator as soon as possible and no later than 36 hours of determining that a "computer-security incident" that rises to the level of a "notification incident," as those terms are defined in the final rule, has occurred. A notification incident is a "computer-security incident" that has materially disrupted or degraded, or is reasonably likely to materially disrupt or degrade, the banking organization's ability to deliver services to a material portion of its customer base, jeopardize the viability of key operations of the banking organization, or impact the stability of the financial sector. The final rule also requires bank service providers to notify any affected bank to or on behalf of which the service provider provides services "as soon as possible" after determining that it has experienced an incident that materially disrupts or degrades, or is reasonably likely to materially disrupt or degrade, covered services provided to such bank for four or more hours. The rule was effective April 1, 2022, with compliance required by May 1, 2022.

Anti-Money Laundering and OFAC. Under federal law, financial institutions must maintain anti-money laundering programs that include established internal policies, procedures, and controls. Financial institutions are also prohibited from entering into specified financial transactions and account relationships and must meet enhanced standards for due diligence and customer identification. Financial institutions must take reasonable steps to conduct enhanced scrutiny of account relationships to guard against money laundering and to report any suspicious transactions. Law enforcement authorities have been granted increased access to financial information maintained by financial institutions. Bank regulators routinely examine institutions for compliance with these obligations. The U.S. Department of the Treasury's Office of Foreign Assets Control, or "OFAC," is responsible for helping to ensure that U.S. entities do not engage in transactions with certain prohibited parties, as defined by various Executive Orders and Acts of Congress. OFAC publishes lists of persons, organizations, and countries suspected of aiding, harboring or engaging in terrorist acts, known as Specially Designated Nationals and Blocked Persons. If the Bank finds a name on any transaction, account or wire transfer that is on an OFAC list, the Bank must freeze or block such account or transaction, file a suspicious activity report and notify the appropriate authorities. The U.S. Treasury Department's Financial Crimes Enforcement Network ("FinCEN") rules include customer due diligence requirements for banks, including a requirement to identify and verify the identity of beneficial owners of customers that are legal entities, subject to certain exclusions and exemptions.

The Anti-Money Laundering Act of 2020 ("AMLA"), which amends the BSA, was enacted in January 2021. The AMLA is intended to comprehensively reform and modernize U.S. bank secrecy and anti-money laundering laws. Among other things, it codifies a risk-based approach to anti-money laundering compliance for financial institutions; requires the U.S. Department of the Treasury to promulgate priorities for anti-money laundering and countering the financing of terrorism policy; requires the development of standards for testing technology and internal processes for BSA compliance; expands enforcement and investigation-related authority, including increasing available sanctions for certain BSA violations; and expands BSA whistleblower incentives and protections. In June 2021, FinCEN issued the priorities for anti-money laundering and countering the financing of terrorism policy required under AMLA. The national priorities include: (i) corruption, (ii) cybercrime, (iii) terrorist financing, (iv) fraud, (v) transnational crime, (vi) drug trafficking, (vii) human trafficking and (viii) proliferation financing.

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.

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 FDIC's assessment system is based on each institution's total assets less tangible capital and, for institutions of Lake Shore Savings' asset size, ranges from 3.5 basis points to 32 basis points. Assessment rates are risk based and are based on a formula which uses financial measures and supervisory ratings derived from a statistical model estimating the probability of failure over three years. The FDIC may also issue special assessments. In 2023, the FDIC issued a special assessment for banks with total consolidated assets of \$5 billion or more in order to recover losses sustained by the Deposit Insurance Fund as a result of the March 2023 failures of Silicon Valley Bank and Signature Bank.

The FDIC has authority to increase insurance assessments. As a result of the Consent Order described above, the Bank expects its deposit insurance assessments will remain at an increased level in the near 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.

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 eleven 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, 2023, Lake Shore Savings was in compliance with this requirement.

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;
- The USA PATRIOT Act, which requires savings banks to, among other things, establish broadened anti-money laundering compliance programs, and 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. The Dodd-Frank Act, required the Federal Reserve Board to establish minimum consolidated capital requirements for all depository institution holding companies that are as stringent as those required for insured depository institutions. However, savings and loan holding companies of under \$3.0 billion in consolidated assets are exempt from consolidated regulatory capital requirements, unless the Federal Reserve Board determines otherwise. As a result, the MHC and Lake Shore Bancorp will be exempt from the regulatory capital requirements until consolidated assets exceed \$3.0 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. Federal regulations require 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. Federal regulations further provide 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. On February 15, 2023, the Company announced the suspension of the payment of quarterly dividends. Subject to the prior written approval of the Federal Reserve Board, the Company intends to resume the payment of quarterly cash dividends. However, there is no guarantee as to if and when the Federal Reserve Board will grant the Company its approval to begin the resumption of quarterly cash dividend payments. Lake Shore, MHC is soliciting its members (depositors of Lake Shore Savings Bank) to vote on a proposal to authorize Lake Shore, MHC to waive its right to receive dividends aggregating up to \$0.72 per share that may be declared by the Company in the 12 months subsequent to the approval of the proposal by members. The special meeting of members to consider the proposal will be held on April 2, 2024. There can be no assurance that the members will approve the dividend waiver or that the Federal Reserve Board will not object to the waiver even if it is approved by members at the special meeting. It is expected that Lake Shore, MHC will continue to waive future dividends, if the Company declares dividends to its stockholders in the future, 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 initial 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 stockholders) 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 risk factors. The risks listed here may not be the only risks we face. Additional risks that are not

presently known, or that we presently deem immaterial, could also have a material effect on our financial condition, results of operations, business and prospects:

Risks Related To Regulatory Compliance

The Bank is a party to a Consent Order (the “Order”) with the OCC relating to information technology, security, automated clearing house program, audit, management, and BSA/AML deficiencies. In addition, the Company and Lake Shore, MHC have entered into an Agreement with the Reserve Bank. Failure to comply with the Order or the Agreement may result in further regulatory enforcement actions. We expect that our non-interest expense will remain elevated as a result of remediation actions we will take in order to comply with the requirements of the Order and the Agreement which may adversely affect our financial performance. Effective as of February 9, 2023, the Bank and the OCC entered into the Order. The Order replaces the prior Agreement between the Bank and the OCC dated July 13, 2022 (“Written Agreement”), which has been terminated in connection with the entry into the Order. The Order provides, among other things, that the Bank will take the following actions within specified time frames as set forth in the Order:

- create a compliance committee to monitor and oversee the Bank’s compliance with the Order and submit monthly reports to the Board of Directors of the Bank and the OCC;
 - develop, adopt, implement, and thereafter adhere to a program for corporate governance and Board oversight of the Bank’s operation and structure;
 - establish, and review at least annually, the objectives by which senior executive officers’, as well as the Chief Technology Officer’s, the Information Security Officer’s, and the Bank Secrecy Act (“BSA”) Officer’s, effectiveness will be measured and prepare an annual written performance appraisal for each Bank senior executive officer evaluating the performance of such objectives;
 - ensure that the Bank has competent management in place, review the capabilities, experience, qualifications and performance of the Bank’s management, including, but not limited to, the Chief Executive Officer, Chief Operating Officer, Chief Technology Officer, Information Security Officer and BSA Officer, and the Board will determine whether management changes should be made;
 - if an officer will continue in his or her position, but the Board determines the officer’s depth of skills needs improvement, it will develop and implement a written program to improve the officer’s supervision and management of the Bank;
 - submit to the OCC for review and prior written determination of no supervisory objection an acceptable written strategic plan for the Bank covering at least a three-year period;
 - submit to the OCC for review an acceptable, comprehensive, written internal audit program that adequately assesses controls and operations to allow the Board and management to understand the sufficiency of the Bank’s internal controls program;
 - develop, adopt and implement a written program to effectively assess and manage the Bank’s information technology (“IT”) activities, commensurate with the level of risk and complexity of the Bank’s IT activities, subject to review and prior written determination of no supervisory objection by the OCC;
 - develop, adopt and implement a written information security program that includes administrative, technical and physical safeguards to ensure the security and confidentiality of customer information, subject to review and prior written determination of no supervisory objection by the OCC;
 - adopt and implement the written automated clearing house risk management program previously given no supervisory objection by the OCC in connection with the Written Agreement;
 - analyze the current BSA/AML risk profile and strategic direction of the Bank to determine the skills, experience, and expertise required of the Bank’s BSA Officer and develop a comprehensive job description detailing all the requirements and responsibilities of the BSA Officer role with such appointment of a BSA Officer subject to OCC non-objection;
 - ensure that the Bank’s BSA Department maintains sufficient personnel with requisite expertise, training, skills, and authority to ensure the safe and sound operation of the Bank;
 - develop, adopt, implement and ensure that the BSA Officer and any supporting staff receive training, and thereafter ensure the Bank’s adherence to a written system of internal controls reasonably designed to provide for ongoing compliance with BSA regulatory requirements, including appropriate suspicious activity monitoring and reporting;
-

- ensure that Bank management develops, implements, and thereafter maintains adherence to an enhanced written risk-based program of internal controls and processes to ensure compliance with OCC regulations to file suspicious activity reports (“SARs”);
- submit to the OCC for prior written determination of no supervisory objection, the name and qualifications of a proposed independent, third-party consultant to conduct a look-back review of certain medium and high risk activity over a six-month period and provide a written report on the Bank’s SARs monitoring, including a proposed scope and timeline for completion of the engagement;
- revise, develop, adopt, implement, and thereafter ensure the Bank’s adherence to expanded account opening policies and procedures for all accounts that pose greater than normal risk for compliance with the BSA;
- develop, adopt, implement, and thereafter ensure the Bank’s adherence to procedures for periodically reviewing, testing, and updating the Bank’s BSA/AML model risk assessments; and
- develop, adopt, implement, and thereafter ensure the Bank’s adherence to requirements for the periodic independent validation of the Bank’s BSA/AML systems to ensure the system is detecting potentially suspicious activity.

On June 28, 2023, Lake Shore, MHC and Lake Shore Bancorp entered into a written agreement (the “Agreement”) with the Federal Reserve Bank of Philadelphia (the “Reserve Bank”), the companies’ regulator. The Agreement provides, among other things, that the companies take appropriate steps to fully utilize the companies’ financial and managerial resources to serve as a source of strength to the Bank, including, but not limited to, taking steps to ensure that the Bank complies with the Consent Order and not, directly or indirectly, declare or pay dividends, increase or guarantee any debt without prior approval.

Management and the Bank’s Board of Directors are committed to promptly addressing the action items included in the Order and the Agreement. However, we may not be successful in complying fully with the provisions of the Order or the Agreement. The OCC and the Reserve Bank will determine whether or not the provisions of the Order and the Agreement have been met. In the event we are in material non-compliance with the terms of the Order or the Agreement, the OCC and the Reserve Bank have the authority to subject us to additional enforcement actions, such as civil money penalties and removal of directors and officers from their positions with the Bank, the Company or Lake Shore, MHC. Moreover, the work required to comply with the Order may place a significant burden on management and internal resources of the Bank. Any significant diversion of management attention away from ongoing business and any reputational harm encountered during the process could affect the financial results of the Company. We expect that our non-interest expense will remain elevated as a result of remediation actions we will take in order to comply with the requirements of the Order and the Agreement which may adversely affect our financial performance.

The Bank has been designated as being in “Troubled Condition” by the OCC. The Bank is subject to restrictions on its operations as a result of this designation. The Bank has been designated as being in “Troubled Condition” under the rules and regulations of the OCC, which places restrictions on the Bank with respect to board members and senior executive officers, including adding or replacing board members or hiring senior executive officers, as well as on the Bank’s ability to enter into agreements that provide for, and to pay, certain severance payments to our directors, officers and employees. These restrictions may limit the Bank’s ability to expand its board and management team. For more information, see “Supervision and Regulation—Troubled Condition.”

Non-compliance with the USA PATRIOT Act, Bank Secrecy Act and related regulations may subject us to fines or sanctions. The USA PATRIOT and Bank Secrecy Acts require financial institutions to develop programs to prevent financial institutions from being used for money laundering and terrorist activities. Once such activities are detected, financial institutions are obligated to file suspicious activity reports with the U.S. Treasury’s Office of Financial Crimes Enforcement Network. These rules require financial institutions to establish procedures for identifying and verifying the identity of customers that open new financial accounts. Failure to comply with these regulations could result in fines or sanctions. The Order cited the Bank’s failure to adequately develop, design and maintain our Bank Secrecy Act programs which could lead to additional sanctions and other negative actions, restrictions on conducting acquisitions or establishing new branches and other regulatory actions which would have serious reputational consequences for us, and which would have a material adverse effect on our business, financial condition or results of operations.

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 credit 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.

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 stockholders. Our long-term ability to pay dividends to our stockholders 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. On February 15, 2023, the Company announced the suspension of the payment of quarterly dividends. Subject to the prior written approval of the Federal Reserve Board, the Company intends to resume the payment of quarterly cash dividends. However, there is no guarantee as to if and when the Federal Reserve Board will grant the Company its approval to begin the resumption of quarterly cash dividend payments.

In circumstances when the Bank is not operating under a consent order, it 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 under OCC safe harbor regulations. 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 stockholder 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. The ability to waive dividends meant that Lake Shore Bancorp had more cash resources to pay dividends to its public stockholders 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.

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 is soliciting its members (depositors of Lake Shore Savings Bank) to vote on a proposal to authorize Lake Shore, MHC to waive its right to receive dividends aggregating up to \$0.72 per share that may be declared by the Company in the 12 months subsequent to the approval of the proposal by members. The special meeting of members to consider the proposal will be held on April 2, 2024. There can be no assurance that the members will approve the dividend waiver or that the Federal Reserve Board will not object to the waiver even if it is approved by members at the special meeting. It is expected that Lake Shore, MHC will continue to waive future dividends, if the Company declares dividends to its stockholders in the future, 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 stockholders may be substantially impaired and the amounts of any such dividends may be significantly reduced.

We may be required to raise additional capital in the future, but that capital may not be available when it is needed, or it may only be available on unacceptable terms, which could adversely affect our financial condition and results of operations. We are required by federal regulatory authorities to maintain adequate levels of capital to support our operations. The Bank is also subject to an Individual Minimum Capital Requirement as described above. We may at some point, however, need to raise additional capital to support continued growth or be required by our regulators to increase our capital resources. Our ability to raise additional capital, if needed, will depend on conditions in the capital markets at that time, which are outside of our control, and on our financial performance. Accordingly, we may not be able to raise additional capital, if needed, on terms acceptable to us. If we cannot raise additional capital when needed, our ability to further expand our operations and pursue our growth strategy could be materially impaired and our financial condition and liquidity could be materially and adversely affected. In addition, if we are unable to raise additional capital when required by our bank regulators, we may be subject to adverse regulatory action.

Risks Related to Economic Conditions

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. This could lead to a deterioration in 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.

High inflation levels could adversely impact our business and results of operations. The national economy continues to experience elevated levels of inflation. As of December 31, 2023, the year over year consumer price index (“CPI”) increase was 3.4% primarily driven by increases in transportation, shelter, and food prices. As a result, the Federal Reserve raised interest rates by 100 basis points in 2023 to combat rising inflation. High inflation, if sustained, could have an adverse effect on our business. The increase in interest rates in response to elevated levels of inflation has decreased the value of our securities portfolio since 2021, resulting in an increase in unrealized losses recorded in accumulated other comprehensive loss on the stockholders’ equity section of our balance sheet. In addition, inflation-driven increases in our levels of non-interest expense could negatively impact our results of operations. High inflation and increasing interest rates could also cause increased volatility in the business environment, which could adversely affect loan demand and borrowers’ ability to repay loans.

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’s actions affect 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 on other monetary and fiscal policies. We cannot predict the nature or impact of future changes in monetary and fiscal policies.

Risks Related to Technology

Our information systems experienced an interruption or breach in security which could disrupt business, cause increased operating costs, damage our reputation, and result in litigation and other liabilities. In November 2021, the Bank experienced a data security incident that prevented employees from accessing internal systems and data for a limited period of time. Upon discovering the incident, the Bank immediately launched an investigation and engaged a digital forensics firm to help determine the scope of the incident and identify potentially impacted data. The Bank also promptly

notified law enforcement and the Bank's primary regulator, the OCC, about the incident. Through its investigation, the Bank identified unauthorized access to certain data in its internal systems. However, the Bank believes that its core banking and electronic interfaces were not affected by this event, including deposit and loan systems, online/mobile banking system or ATM systems. While there is no evidence that customer personal information was misused, the Bank notified affected customers of the incident. All impacted individuals were offered identity theft protection services. The Bank has implemented additional safeguards to help ensure the security of its network to reduce the risk of a similar event occurring in the future.

Although we maintain insurance coverage, including cybersecurity insurance, the amount available under coverage may not cover all losses. Costs and expenses incurred by the Bank in connection with the November 2021 incident includes both direct and indirect costs and not all of the costs were covered by our insurance coverage. Further, both as a result of the November 2021 incident and industry trends generally, the Company will incur higher costs for the renewal of the Company's current insurance coverage, as well as future cybersecurity insurance coverage.

As a result of the incident, we did incur one-time and ongoing expenses for the implementation and operation of a cloud computing system and enhancements to system security, including additional hardware, software and maintenance expenses. In addition, we incurred one-time consulting expenses, as well as increased personnel expenses as a result of hiring a Chief Technology Officer and an Information Security Officer during the fourth quarter of 2022 and the first quarter of 2023, respectively. We may be subject to future incidents that could have a material adverse effect on our business, results of operations or financial condition or may result in operational impairments and financial losses, as well as significant harm to our reputation.

We rely heavily on communications and information systems to conduct our business. The computer systems and network infrastructure we use could be vulnerable to hardware and cybersecurity issues. Our operations are dependent on our ability to protect our computer equipment from fire, power loss, telecommunications failure or other similar catastrophic event. We could also experience a breach by intentional or negligent conduct on the part of employees or other internal or external sources, including our third party vendors, unknown third parties or through cyber-attacks. The risk of a breach can exist whether information systems and services are in our internal data centers or in third party data centers, including cloud-based computing services. Breaches have occurred, and may occur again, in our systems and in the systems of our third party vendors. 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.

The risk of cyber-threats continue to evolve and are substantially escalating and we may be required to expend significant additional resources to continue to modify or enhance our protection measures to mitigate information security vulnerabilities or incidents. 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. We maintain a system of internal controls, disaster recovery plans and contingency plans, which are periodically reviewed, updated and tested. In connection with the Order, the Bank has enhanced its Information Technology program. The Company also reviews and evaluates the disaster recovery plans of its third party vendors that provide critical computing systems to the Company.

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. Furthermore, new payment services developed and offered by non-financial institution competitors pose an increasing threat to the traditional payment services offered by financial institutions. 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 and we may not be able to effectively deploy new technologies to improve our operational efficiency. Failure to successfully keep pace with technological change affecting the financial services industry could have a material adverse effect on us.

Risks Related to Credit

We are subject to lending concentration risks. As of December 31, 2023, commercial real estate (including commercial construction) and commercial business loans comprised in the aggregate 59.7% of our total loan portfolio. 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.

A 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. If there was a downturn in the real estate market or our national or local economy, due to inflation, changes in interest rates or monetary policy, increased unemployment or other reasons, then this 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. Because commercial loans generally have a higher loan balance in comparison to residential real estate loans, the deterioration of one or a few of these loans could cause a significant increase in nonaccrual loans, which could have a material adverse effect on our financial condition and results of operations.

Deteriorating credit quality could adversely affect our earnings. 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 credit losses for loans and unfunded commitments on a quarterly basis to ensure that it sufficiently reflects management's estimate of expected losses as of the valuation date.

Our investment portfolio may experience credit deterioration, which could have a material adverse effect on our operating results. Numerous factors, including the credit quality of the counterparty, adverse changes in business climate, adverse actions by regulators, lack of liquidity for re-sales of certain investment securities, or unanticipated changes in the competitive environment could have a negative effect on our investment portfolio or other assets in future periods. The existence of credit deterioration within the investment portfolio could cause us to add to our allowance for credit losses. We review our allowance for credit losses on our investment portfolio on a quarterly basis to ensure that it sufficiently reflects management's estimate of expected losses inherent within the investment portfolio.

Material additions to our allowance for credit losses on loans, unfunded commitments, or the investment portfolio also would materially decrease our net income, and the charge-off of loans may cause us to increase the allowance for credit 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 credit losses on loans. We rely on underlying credit ratings of our investment portfolio, as well as other economic characteristics, to determine if a credit loss exists within our investment portfolio and whether an allowance for credit losses on investments is required. If our assumptions prove to be incorrect, our allowance for credit losses may not be sufficient to cover losses inherent in our loan, unfunded commitment, and investment portfolios, resulting in additions to our allowance for credit losses. 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 credit losses and provision for credit losses. If we were to further increase the amount of commercial loans in our portfolio, we may decide to make increased provisions for credit losses. In addition, bank regulators periodically review our allowance for credit losses and may require us to increase our provision for credit losses or recognize further loan charge-offs, which may have a material adverse effect on our financial condition and results of operations.

Risks Related To Our Business

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. As interest rates rise, loan demand may slow down, and deposit expenses may increase, which could lower our net interest income and profitability.

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. The Bank is currently operating under an Order with the OCC and we cannot assure you that we will be able to retain our existing key personnel or attract additional qualified personnel. Although we have a retention agreement with our Executive Vice President Commercial Division, 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 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 and our customers. 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 deploy a diverse set of risk monitoring and mitigation techniques, including internal management and third-party engagement in risk processes; risk identification and mitigation processes are inherently limited because they cannot anticipate the existence or future development of currently unanticipated or unknown risks. As part of our remediation activities relating to the Order, management is working to improve certain areas of risk management. 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.

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.

Our ability to grow may be limited. We intend to seek to expand our banking franchise, organically via deposit and loan growth, while addressing the operational, compliance and governance deficiencies cited in the Order that was disclosed previously herein. We cannot assure you that we will be able to generate organic growth. Competition in our market areas for loans and deposits may limit our opportunities for growth, as well as the impact of economic conditions, including an increase in inflation rates and costs to borrow funds.

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 commercial banks, credit unions, savings banks and online banks. Competition has increased in our market areas as a result of new entrants to the Erie County market area. We face additional competition for depositors from non-depository competitors such as the mutual fund industry, securities and brokerage firms, and insurance companies. 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.

Risks Related to Interest Rates and Liquidity

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 which occurred in 2022 and 2023, 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. The impact on earnings is more adverse when the slope of the yield curve flattens or inverts, i.e. when short-term interest rates increase more than corresponding changes in long-term rates or when long-term rates decrease more than corresponding changes in short-term rates.

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’ 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.

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 62.6% of total deposits at December 31, 2023. Additional available unused sources of liquidity include borrowings from the Federal Reserve of New York discount window, FHLB borrowings, brokered deposits and lines of credit with correspondent banks. Liquidity is further provided by unencumbered, or unpledged, investment securities that totaled \$56.8 million at December 31, 2023. As a result of the Order previously disclosed herein, the Company’s ability to access available sources of funds from the FHLB has been curtailed to short-term advances (i.e., 30 days or less) and the residential loans pledged as collateral for these borrowings will be subject to reductions in value. The availability of lines of credit with other correspondent banks may also be reduced or eliminated. Lastly the unsecured line of credit for our Master Account at the Federal Reserve has been withdrawn at this time.

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 regulatory restrictions, 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, 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.

Adverse developments affecting the financial services industry, such as bank failures or concerns involving liquidity, may have a material effect on the Company's operations. Events relating to the failures of certain banking entities in March 2023, i.e. Silicon Valley Bank and Signature Bank, have caused general uncertainty and concern regarding the liquidity adequacy of the banking sector as a whole. Uncertainty may be compounded by the reach and depth of media attention, including social media, and its ability to disseminate concerns or rumors about any events of these kinds or other similar risks, and have in the past and may in the future lead to market-wide liquidity problems. These failures underscore the importance of maintaining diversified sources of funding as key measures to ensure the safety and soundness of a financial institution. As a result, market conditions and other external factors may impact the competitive landscape for deposits in the banking industry in an unpredictable manner. The rising interest rate environment has increased competition for liquidity and the premium at which liquidity is available to meet funding needs.

Risks Related to Investment in the Company's Stock

We expect that our return on equity will be low compared to other financial institutions as a result of our high level of capital. Return on average equity, which equals net income divided by average equity, is a ratio used by many investors to compare the performance of a particular company with other companies. Our return on equity may be low while we continue to leverage capital levels via organic growth of loans and deposits. As we implement our strategic plan to increase net interest income and non-interest income via organic growth, we expect our return on equity ratio to improve. Failure to achieve a competitive return on average equity might make an investment in our common stock unattractive to some investors and might cause our common stock to trade at lower prices than comparable financial institutions with higher returns on average equity.

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, stockholders 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 meet 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 stockholders and depositors could lose confidence in the Company's financial reporting, which could harm its business and the trading price of its stock.

Public stockholders 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 most matters presented to the stockholders of Lake Shore Bancorp for resolution by vote. 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 stockholders other than Lake Shore, MHC. There is no assurance that Lake Shore, MHC will not take actions that the public stockholders believe are against their interests.

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 3,000 shares per day during 2023. 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.

Item 1B. Unresolved Staff Comments.

None.

Item 1C. Cybersecurity.

The Company recognizes the security of our operations is critical to protecting our customers and maintaining the reputation of the Company. Management is committed to managing Information Security Risk, which includes cybersecurity, that may impact the Company. The Enterprise Risk Committee (ERC) of the Board of Directors provides oversight of the Company's written Information Security Management and Information Technology Governance Programs (the "Programs"). Through the Programs, the Company has established policies, processes, controls, and systems designed to identify, assess, measure, manage, monitor, and report risks related to cybersecurity and help prevent or limit the effect of possible cybersecurity threats and attacks. As cybersecurity threats continue to evolve, the Company expects to continue to monitor and enhance the current controls and systems in place to detect and prevent cybersecurity attacks and to remediate discovered vulnerabilities.

The Company's Information Security Officer (ISO) is responsible for the design and execution of the Information Security Management Program and the information and cyber security aspects of the Information Technology Governance Program. The ISO provides the ERC with regular reports on the status and effectiveness of the Programs and risk management activities, as well as cyber and information security issues that may affect the Company. In addition, the ISO regularly reports the status to Executive Management.

The Company utilizes the following guidelines and frameworks to develop and maintain the Information Security Management Program: Federal Financial Institutions Examination Council (FFIEC) Information IT Examination Handbooks, FFIEC Cybersecurity Assessment Tool (CAT), Center for Internet Security Critical Security Controls, National Institute of Standards and Technology Special Publication 800 Series, National Institute of Standards and Technology Cybersecurity Framework (CSF), 12 CFR Appendix B to Part 30 - Interagency Guidelines Establishing Standards for Safety and Soundness Gramm-Leach-Bliley Act (GLBA) 501(b).

The Information Security Management Program features layered controls of network and endpoint intrusion detection and prevention, enterprise malware protection, threat-monitoring, and a Security Operations Center that provides

full time support and additional operational measures to monitor and respond to data breaches and cyberattacks. The Company leverages regular assessments to identify current and potential threats and vulnerabilities within the Company's environment. Technical vulnerabilities are identified through regular automated vulnerability scanning tools and periodic vulnerability and penetration testing performed by independent third parties. Non-technical vulnerabilities are identified through the Information Technology and Information Security Assurance Program by conducting regular process and procedural reviews as well as risk assessments. The Company uses the FFIEC CAT to help identify cybersecurity risks and determine our cybersecurity preparedness. The Company's information security and cybersecurity risk appetite statements define the levels of risk the Company is willing to accept and guide the risk management decisions of the Company. The risk appetite statements are approved by the Board of Directors annually.

The Company has an Incident Response Plan to help reduce the risks related to security incidents by providing guidelines on responding to incidents; focusing on a roadmap for coordinating personnel, policies, and procedures to ensure incidents are detected, analyzed, and handled appropriately.

The Company also recognizes the risks associated with the use of third party providers and maintains a Third Party Risk Management Program that is responsible for the oversight of outsourced services. This enables the Company to identify risks related to third parties through an inherent risk assessment and a due diligence review process designed to ensure third parties are in compliance with the Company's risk and information security expectations.

The Company's Security Awareness Program provides annual, mandatory training for personnel on information security to prepare personnel with the knowledge of how to properly use and protect Company resources from internal and external threats. The Program also conducts regular phishing assessments and targets new hires and other groups with specific training related to their job activities or risk levels. The Program also communicates information security policies, standards, and practices to personnel and requires annual review and acknowledgement of the policies.

The ISO has served various roles in audit, information risk, information technology, and information security in multiple industries for over 12 years. The ISO holds an undergraduate degree in Management Information Systems and has attained the ISACA Certification in Certified Information Systems Auditor (CISA). The ISO reports to the Chief Financial Officer (CFO) as well as the Chairperson of the ERC.

For the year ended December 31, 2023, the Company has not identified any specific risk from a cybersecurity threat that has materially affected, or is reasonable likely to affect, the Company's business strategy, results of operation, or financial condition, other than those described in Item 1A. Risk Factors - Risks Related to Technology.

Item 2. Properties.

We conduct our business through our corporate headquarters, administrative offices, and eleven branch offices. At December 31, 2023, the net book value of our buildings and premises was \$6.9 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 audited consolidated financial statements beginning on page F -1 of this report.

Location	Leased or Owned	Original Date Acquired
Corporate Headquarters		
31 East Fourth Street Dunkirk, NY 14048	Owned	2003
Branch Offices:		
<u>Chautauqua County branches</u>		
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	1998
<u>Erie County branches</u>		
5751 Transit Road East Amherst, NY 14051	Owned	2003
3111 Union Road Orchard Park, NY 14127	Owned	2003
59 Main Street Hamburg, NY 14075	Leased ⁽³⁾	2005
3438 Delaware Avenue Kenmore, NY 14217	Owned	2008
570 Dick Road Depew, NY 14043	Leased ⁽⁴⁾	2009
4950 Main Street Snyder, NY 14226	Owned	2012
<u>Administrative Offices:</u>		
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 on a month-to-month basis.

⁽²⁾ The building is owned. The land is leased. The lease expires in 2025.

⁽³⁾ The lease expires in 2028.

⁽⁴⁾ The lease expires in 2024, but has an option for a five-year renewal at expiration.

Item 3. Legal Proceedings.

At December 31, 2023, 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, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information

Lake Shore Bancorp, Inc. common stock trades on the Nasdaq Global Market under the symbol “LSBK”.

On February 15, 2023, the Company announced the suspension of the payment of quarterly dividends to its stockholders for the preservation of capital to support the Bank while the Bank began operating under a consent order with the OCC and the Company began operating pursuant to a written agreement with the Federal Reserve Bank of Philadelphia (the "Reserve Bank"). Subject to the prior written approval of the Reserve Bank, the Company intends to resume the payment of quarterly cash dividends sometime in 2024. However, there is no guarantee as to if and when the Reserve Bank will grant the Company its approval to begin the resumption of quarterly cash dividend payments. The Board of Directors evaluates the payment of dividends and makes a dividend payment decision based on its review of certain factors such as our earnings, financial condition, capital requirements, regulatory limitations on the payment of dividends, and other relevant factors. No assurance can be given that dividends will be declared or, if declared, what the amount of dividends will be, or whether such dividends will continue. Refer to Part I, Item 1. “Business – Supervision and Regulation - Federal Banking Regulations - Capital Distributions”, “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 Regulatory Compliance” above for information on the current and possible future restriction of dividend payments and MHC dividend waivers.

As of February 14, 2024, there were 673 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 following table reports information regarding repurchases by Lake Shore Bancorp of its common stock in each month of the quarter ended December 31, 2023. The Company has suspended its stock repurchase program.

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Maximum Number of Shares that May Yet be Purchased Under the Plans or Programs ⁽¹⁾
October 1 through October 31, 2023	—	\$ —	—	30,626
November 1 through November 30, 2023	—	—	—	30,626
December 1 through December 31, 2023	—	—	—	30,626
Total	—	\$ —	—	30,626

⁽¹⁾ On August 13, 2021, the Board of Directors of Lake Shore Bancorp, Inc. (the “Company”) adopted a new stock repurchase program. The stock repurchase program authorizes the Company to repurchase up to an aggregate of 106,327 shares, or approximately 5% of its outstanding shares, excluding the shares held by Lake Shore, MHC. The repurchase program permits shares to be repurchased in open market or private transactions, through block trades, and pursuant to any trading plan that may be adopted in accordance with Rule 10b5-1 of the Securities and Exchange Commission. The repurchase plan does not have an expiration date and superseded all prior stock repurchase programs.

Item 6. Reserved.

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 audited consolidated financial statements and accompanying notes to the audited consolidated financial statements beginning on page F-1 of this Form 10-K, and the other statistical data provided in this Form 10-K.

Overview

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, debit card fees, earnings on bank owned life insurance, gains and losses on interest rate swaps and the sales of securities and loans, our provision for credit 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. In 2024, we expect that non-interest expenses will continue at their increased levels similar to 2023 as the Bank works to remediate the issues cited in the Order and the Agreement as further discussed below.

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 and commercial real estate, 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, as well as regulatory actions, may materially impact the Company.

Management Strategy

Remediating the issues raised in the Consent Order and the Agreement. Effective as of February 9, 2023, the Bank consented to the issuance of a Consent Order (the "Order") by the OCC. The Order replaced the prior Agreement between the Bank and the OCC dated July 13, 2022 which was terminated in connection with the entry into the Order. The Order requires the Bank to correct deficiencies relating to information technology, security, automated clearing house program, audit, management and BSA/AML. Management and the Bank's Board of Directors are committed to promptly addressing the action items included in the Order. On June 28, 2023, Lake Shore, MHC and Lake Shore Bancorp entered into a written agreement (the "Agreement") with the Reserve Bank. The Agreement provides, among other things, that the companies take appropriate steps to fully utilize the companies' financial and managerial resources to serve as a source of strength to the Bank, including, but not limited to, taking steps to ensure that the Bank complies with the Order and not, directly or indirectly, declare or pay dividends, increase or guarantee any debt without prior approval. We expect that our non-interest expenses will continue at their increased levels as a result of remediation actions we will take in order to comply with the requirements of the Order and the Agreement which may adversely affect our financial performance.

Our Reputation. Our primary management strategy has been to maintain our position as an authentic community bank, locally headquartered in Western New York, with more than 132 years of service to our community. Our management team strives to accomplish this goal by continuing to emphasize our exceptional individualized customer service and financial strength, continued community involvement, strong capital levels, multi-channel banking services and penetration in our market areas via organic growth of loans and deposits.

Branding and Marketing. We currently operate eleven full-service branch offices throughout Western New York, where our branch teams initiate and develop both consumer and commercial customer relationships in and around the surrounding market areas. We offer concierge banking services, together with our online and mobile customer conveniences,

creating a truly individualized approach for customers to manage their finances whenever, wherever and however they wish. As a true local bank, we pride ourselves on offering competitive products delivered with the individualized service our customers have come to expect. Our experienced team of commercial bankers can meet the needs of nearly any type of business through a variety of checking and credit products, and banking services. The retail banking team located in our branch offices focuses on meeting the deposit and lending needs of consumer customers throughout various life stages as well as small business customers. Our team members live and work right here in our Western New York communities and can fully understand the specific challenges and opportunities our customers face daily. As the banking industry continues to rapidly evolve in terms of technological conveniences, we remain proactive in our efforts to provide e-banking services that our customers expect. From local decision-making, responding quickly and efficiently to customer needs, and utilizing technology to level the playing field with our competitors, we are committed to developing long-term relationships with our customers. Staying true to our local roots and mission of “Putting People First” continues to uniquely position us as a bank of choice in Western New York.

Technology and Data Security. 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 enhanced the security, monitoring and updating of our computer systems via the deployment of a cloud-based computing system, and supporting hardware and software. During 2023, we continued to leverage the use of a new core banking system that we implemented during the third quarter of 2021, which improved our ability to efficiently serve our customers and provides our customers with updated e-banking services for their convenience.

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 maintain our loan portfolio while improving our asset quality.

Due to the interest rate risk inherent in holding long-term, fixed rate one- to four-family real estate loans in our portfolio, 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, 2023 and 2022, our commercial real estate loan portfolio (including loans to finance the construction of commercial real estate) represented the largest holdings in our loan portfolio at 56.8% and 56.7%, respectively, of total loans.

At December 31, 2023 and 2022, residential one- to four-family mortgage loans (including loans to finance the construction of one- to four-family homes) represented the second largest holding in our loan portfolio at 30.8% and 30.5%, respectively. We may sell low-yielding long-term conforming fixed rate one- to four-family residential loans that we originate on the secondary market, as part of our interest rate and liquidity risk strategy and asset/liability management, if it is deemed appropriate. During the year ended December 31, 2022, we sold \$1.3 million of low-rate one- to four- family residential loans in the secondary market. We did not sell any low-rate one- to four- family residential loans in the secondary market during the year ended December 31, 2023. We typically retain servicing rights when we sell one- to four-family residential mortgage loans.

Commercial business loans, home equity loans and consumer loans provide diversification to our loan portfolio while meeting the needs of our customers. As of December 31, 2023 and 2022, our commercial business loan portfolio represented 3.0% and 3.4%, respectively, of total loans, while the home equity loan portfolio represented 9.3% and 9.2%, respectively, of total loans.

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.

Critical Accounting Estimates

Disclosure of the Company's significant accounting estimates is included in the notes to the consolidated financial statements of the Company's Annual Report on Form 10-K for the year ended December 31, 2023. Some of these estimates require significant judgment, estimates and assumptions to be made by management, most particularly in connection with determining the allowance for credit losses, securities valuation, and income taxes. The Company adopted ASU 2016-13 - Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, as amended, ("CECL") for all financial assets measured at amortized cost using the modified retrospective method on January 1, 2023 and replaced the allowance for loan losses "incurred loss" model discussed in the Form 10-K for the year ended December 31, 2022 with the allowance for credit losses model. Refer to Notes 2 and 5 in the audited consolidated financial statements for additional information and accounting policies related to the CECL model.

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.

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 credit losses, but include non-accrual loans. The loan yields include net amortization of certain deferred fees and costs that are considered adjustments to yields. The net amortization of deferred loan fees and costs were \$552,000 and \$490,000 for the years ended December 31, 2023 and 2022, respectively. Interest income on securities does not include a tax equivalent adjustment for bank qualified municipal bonds.

	For the Year Ended December 31, 2023			For the Year Ended December 31, 2022		
	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	\$ 36,948	\$ 1,805	4.89 %	\$ 19,654	\$ 179	0.91 %
Securities ⁽¹⁾	67,840	1,941	2.86 %	81,352	2,068	2.54 %
Loans, including fees	567,319	30,009	5.29 %	544,914	24,507	4.50 %
Total interest-earning assets	672,107	33,755	5.02 %	645,920	26,754	4.14 %
Other assets	46,057			50,831		
Total assets	\$ 718,164			\$ 696,751		
Interest-bearing liabilities						
Demand & NOW accounts	\$ 76,495	\$ 75	0.10 %	\$ 87,069	\$ 78	0.09 %
Money market accounts	132,816	1,914	1.44 %	169,331	486	0.29 %
Savings accounts	70,600	47	0.07 %	77,248	41	0.05 %
Time deposits	206,218	6,033	2.93 %	138,729	1,210	0.87 %
Borrowed funds & other interest-bearing liabilities	38,701	1,328	3.43 %	25,200	600	2.38 %
Total interest-bearing liabilities	524,830	9,397	1.79 %	497,577	2,415	0.49 %
Other non-interest bearing liabilities	109,907			116,408		
Stockholders' equity	83,427			82,766		
Total liabilities & stockholders' equity	\$ 718,164			\$ 696,751		
Net interest income		\$ 24,358			\$ 24,339	
Interest rate spread			3.23 %			3.65 %
Net interest margin			3.62 %			3.77 %

⁽¹⁾ The tax equivalent adjustment for bank qualified municipal securities results in rates of 3.27% and 2.95% for the years ended December 31, 2023 and 2022, respectively.

Rate Volume Analysis. The following table analyzes the dollar amount of changes in interest income and interest expense for major components of interest-earning assets and interest-bearing liabilities. The table shows the amount of the change in interest income or expense caused by either changes in outstanding balances (volume) or changes in interest rates. The effect of a change in volume is measured by applying the average rate during the first year to the volume change between the two years. The effect of changes in rate is measured by applying the change in rate between the two years to the average volume during the first year. Changes attributable to both rate and volume, which cannot be segregated, have been allocated proportionately to the absolute value of the change due to volume and the change due to rate.

	Year Ended December 31, 2023 Compared to Year Ended December 31, 2022		
	Rate	Volume	Net Change
		(Dollars in thousands)	
Interest-earning assets:			
Interest-earning deposits & federal funds sold	\$ 1,353	\$ 273	\$ 1,626
Securities	241	(368)	(127)
Loans, including fees	4,461	1,041	5,502
Total interest-earning assets	6,055	946	7,001
Interest-bearing liabilities:			
Demand & NOW accounts	7	(10)	(3)
Money market accounts	1,554	(126)	1,428
Savings accounts	10	(4)	6
Time deposits	3,997	826	4,823
Total deposits	5,568	686	6,254
Other interest-bearing liabilities:			
Borrowed funds & other interest-bearing liabilities	356	372	728
Total interest-bearing liabilities	5,924	1,058	6,982
Total change in net interest income	\$ 131	\$ (112)	\$ 19

As shown in the above tables, the increase in net interest income for the year ended December 31, 2023 as compared to the prior year was primarily due to an increase in the average yield earned on interest-earning assets and an increase in the average balance of interest-earning assets. Net interest rate spread decreased by 42 basis points to 3.23% for the year ended December 31, 2023 as compared to 3.65% for the year ended December 31, 2022. Net interest margin decreased by 15 basis points to 3.62% for the year ended December 31, 2023 as compared to 3.77% for the prior year. The decrease in net interest rate spread and net interest margin were primarily due to a 206 basis points increase in the average rate paid on time deposits.

Comparison of Financial Condition at December 31, 2023 and December 31, 2022

Total assets at December 31, 2023 were \$725.1 million, an increase of \$25.2 million, or 3.6%, from \$699.9 million at December 31, 2022. The increase in total assets was primarily due to a \$44.1 million increase in cash and cash equivalents and a \$6.1 million increase in bank-owned life insurance, partially offset by a \$17.7 million decrease in loans receivable, net, and a \$12.6 million decrease in securities available for sale.

Cash and cash equivalents increased by \$44.1 million, or 457.8%, from \$9.6 million at December 31, 2022 to \$53.7 million at December 31, 2023. The increase was primarily due to a \$20.8 million cash inflow due to an increase in total deposits, a \$17.7 million decrease in loans receivable and a sale of \$9.8 million of securities available-for-sale, partially offset by a \$2.3 million net cash outflow due to a decrease in short-term borrowings and long-term debt and a purchase of additional bank-owned life insurance of \$12.6 million.

Securities decreased by \$12.6 million, or 17.3%, from \$73.0 million at December 31, 2022 to \$60.4 million at December 31, 2023. The decrease was primarily the result of the sale of \$9.8 million of securities during the year ended December 31, 2023 to reposition our balance sheet.

Net loans receivable decreased during the year ended December 31, 2023, as shown in the table below:

	At December 31, 2023	At December 31, 2022	Change	
			\$	%
(Dollars in thousands)				
Real Estate Loans:				
Residential, one- to four-family ⁽¹⁾	\$ 172,005	\$ 175,904	\$ (3,899)	(2.2) %
Home equity	51,869	53,057	(1,188)	(2.2) %
Commercial ⁽²⁾	316,986	326,955	(9,969)	(3.0) %
Total real estate loans	540,860	555,916	(15,056)	(2.7) %
Other Loans:				
Commercial	16,546	19,576	(3,030)	(15.5) %
Consumer	1,130	1,217	(87)	(7.1) %
Total gross loans	558,536	576,709	(18,173)	(3.2) %
Allowance for credit losses	(6,463)	(7,065)	602	(8.5) %
Net deferred loan costs	3,755	3,893	(138)	(3.5) %
Loans receivable, net	\$ 555,828	\$ 573,537	\$ (17,709)	(3.1) %

(1) Includes one- to four-family construction loans.

(2) Includes commercial construction loans.

The loans receivable, net balance decreased \$17.7 million, or 3.1%, from \$573.5 million at December 31, 2022 to \$555.8 million at December 31, 2023. The decrease was primarily due to decreases in commercial, one- to four-family loans, and home equity loans, as part of our strategy to increase our liquidity. During the year ended December 31, 2023, we remained strategically focused on originating shorter duration, adjustable-rate loans to diversify our asset mix and to manage interest rate risk.

Asset Quality. The following table presents information regarding activity in our allowance for credit losses and our asset quality ratios at or for the dates indicated, including non-performing loan and non-performing asset ratios.

	At or for the Year Ended December 31,	
	2023	2022
	(Dollars in thousands)	
Beginning balance, prior to adoption of ASC 326	\$ 7,065	\$ 6,118
Impact of adopting ASC 326	282	—
(Credit) provision for credit losses	(897)	725
Charge-offs:		
Real estate loans:		
Residential, one- to four-family	(3)	—
Commercial	—	(4)
Other loans:		
Consumer	(58)	(69)
Total charge-offs	(61)	(73)
Recoveries:		
Real estate loans:		
Residential, one- to four-family	2	17
Home equity	—	1
Commercial	35	269
Other loans:		
Commercial	29	—
Consumer	8	8
Total recoveries	74	295
Net recoveries	13	222
Balance at end of period	\$ 6,463	\$ 7,065
Average loans outstanding	\$ 567,319	\$ 544,914
Allowance for credit losses as a percent of total net loans	1.16 %	1.23 %
Allowance for credit losses as a percent of non-performing loans	193.09 %	240.96 %

	At or for the Year Ended December 31,	
	2023	2022
Ratio of net recoveries (charge-offs) to average loans outstanding by loan type, annualized:		
Real estate loans:		
Residential, one- to four-family	— %	0.01 %
Home equity	— %	— %
Commercial	0.01 %	0.09 %
Construction – Commercial	— %	— %
Other loans:		
Commercial	0.15 %	— %
Consumer	(4.41) %	(4.77) %
Ratio of net recoveries to average loans outstanding	— %	0.04 %

	At December 31,	At December 31,
	2023	2022
(Dollars in thousands)		
Loans past due 90 days or more but still accruing:		
Real estate loans:		
Residential, one- to four-family	\$ —	\$ 1
Home equity	—	—
Commercial	—	—
Other loans:		
Commercial	—	—
Consumer	—	—
Total	\$ —	\$ 1
Loans accounted for on a non-accrual basis:		
Real estate loans:		
Residential, one- to four-family ⁽¹⁾	\$ 1,904	\$ 2,295
Home equity	196	602
Commercial ⁽²⁾	1,242	—
Other loans:		
Commercial	—	—
Consumer	5	34
Total non-accrual loans	3,347	2,931
Total non-performing loans	3,347	2,932
Foreclosed real estate	34	95
Total non-performing assets	\$ 3,381	\$ 3,027
Ratios:		
Non-performing loans as a percent of total net loans:	0.60 %	0.51 %
Non-performing assets as a percent of total assets:	0.47 %	0.43 %

⁽¹⁾ Includes one- to four-family construction loans.

⁽²⁾ Includes commercial construction loans.

Total non-performing assets increased by \$354,000, or 11.7%, to \$3.4 million at December 31, 2023 as compared to \$3.0 million at December 31, 2022, primarily due to an increase in non-accrual loans, including one commercial relationship comprised of two loans which were moved to non-accrual status during 2023. Non-performing loans were \$3.3 million at December 31, 2023 compared to \$2.9 million at December 31, 2022.

Other assets increased \$5.7 million, or 80.6%, to \$12.8 million at December 31, 2023 from \$7.1 million at December 31, 2022. The increase was primarily due to a \$6.6 million increase in other assets related to the surrender of certain bank-owned life insurance policies in the fourth quarter of 2023 in which cash consideration is expected to be received in the first quarter of 2024.

The table below shows changes in deposit balances by type of deposit account between December 31, 2023 and December 31, 2022:

	At December 31, 2023	At December 31, 2022	Change	
			\$	%
(Dollars in thousands)				
Core Deposits				
Demand deposits and NOW accounts:				
Non-interest bearing	\$ 95,186	\$ 105,678	\$ (10,492)	(9.9) %
Interest bearing	72,966	85,033	(12,067)	(14.2) %
Money market	137,374	149,250	(11,876)	(8.0) %
Savings	64,584	77,200	(12,616)	(16.3) %
Total core deposits	370,110	417,161	(47,051)	(11.3) %
Non-core Deposits				
Time deposits	220,814	152,958	67,856	44.4 %
Total deposits	<u>\$ 590,924</u>	<u>\$ 570,119</u>	<u>\$ 20,805</u>	<u>3.6 %</u>

The increase in total deposits was primarily due to a 44.4% increase in time deposits, partially offset by a decrease in core deposits. The increase in time deposits was primarily due to a \$51.9 million increase in customer time deposits and a \$16.0 million increase in brokered time deposits. The increase in customer time deposits was primarily due to an increase in customer demand for these types of deposit products due to the rising and competitive interest rate environment. The increase in brokered time deposits was a result of management's strategy to lock in liquidity during a rising interest rate environment, and increased competition for deposits in our market area. The Company's strategic focus is centered on organic growth of deposits among its retail and commercial customers to reduce the reliance on wholesale funding and to strengthen customer relationships. At December 31, 2023 and December 31, 2022 the Company's percentage of uninsured deposits to total deposits was 12.8% and 16.6%, respectively.

Short-term borrowings from the FHLBNY decreased to \$0 at December 31, 2023 from \$12.6 million at December 31, 2022, as the Company paid-off short-term borrowings to decrease interest expense.

Long-term debt consisting of advances from the FHLBNY, increased by \$10.3 million, or 41.3%, from \$25.0 million at December 31, 2022 to \$35.3 million at December 31, 2023. The additional borrowings were used as part of a balance sheet management strategy to fix a portion of funding costs in an effort to mitigate interest rate risk and to lock in liquidity.

Total stockholders' equity increased \$5.1 million, or 6.3%, to \$86.3 million at December 31, 2023 from \$81.2 million at December 31, 2022. The increase in stockholders' equity was primarily attributed to a \$4.1 million increase in retained earnings. The increase was also due to \$947,000 unrealized mark-to-market gain on the available-for-sale securities portfolio recognized in accumulated other comprehensive loss as a result of decreased market interest rates on the investment securities portfolio during the year ended December 31, 2023.

Comparison of Results of Operations for the Year Ended December 31, 2023 and 2022

General. Net income was \$4.8 million for the year ended December 31, 2023, or \$0.82 per diluted share, a decrease of \$0.9 million, or 15.5%, compared to net income of \$5.7 million, or \$0.97 per diluted share, for the year ended December 31, 2022. The decrease in net income for the year ended December 31, 2023, reflected a \$2.4 million increase in non-interest expense, a \$69,000 decrease in non-interest income, and a \$237,000 increase in income tax expense, which was partially offset by a \$1.8 million decrease in (credit) provision for credit losses, and a \$19,000 increase in net interest income.

Net Interest Income. Net interest income increased by \$19,000, or 0.1%, to \$24.4 million for the year ended December 31, 2023 compared to \$24.3 million for the year ended December 31, 2022. Interest income increased by 26.2%, while interest expense increased by 289.1% for the year ended December 31, 2023 when compared to the year ended December 31, 2022. Interest rate spread and net interest margin were 3.23% and 3.62%, respectively, for the year ended December 31, 2023 compared to 3.65% and 3.77%, respectively, for the year ended December 31, 2022.

Interest Income. Interest income increased by \$7.0 million, or 26.2%, to \$33.8 million for the year ended December 31, 2023 when compared to the year ended December 31, 2022 primarily due to an increase in loan interest income. Loan interest income increased \$5.5 million, or 22.5 %, to \$30.0 million for the year ended December 31, 2023 when compared to the year ended December 31, 2022. The increase was primarily due to a 79 basis points increase in the average yield on loans to 5.29% for the year ended December 31, 2023 as compared to 4.50% for the year ended December 31, 2022 as a result of rising interest rates. The increase in loan interest income was also aided by an increase in the average balance of the loan portfolio of \$22.4 million, or 4.1%, from \$544.9 million for the year ended December 31, 2022 to \$567.3 million for the year ended December 31, 2023. The increase in the average balance of loans was primarily due to growth in the average balance of commercial real estate, one- to four- family real estate loans, and home equity loans.

Investment interest income decreased \$127,000, or 6.1%, to \$1.9 million for the year ended December 31, 2023 compared to the year ended December 31, 2022, due to a decrease in the average balance of securities of \$13.5 million, or 16.6%, partially offset by a 32 basis points increase in the average yield of the investment portfolio. The average yield was 2.54% for the year ended December 31, 2022 as compared to 2.86% for the year ended December 31, 2023. The decrease in the average balance and the increase in the average yield of our securities was the result of the sale of securities during 2023 to reposition our balance sheet.

Other interest income increased by \$1.6 million, to \$1.8 million for the year ended December 31, 2023, as compared to \$179,000 for the year ended December 31, 2022. The increase in other interest income was significantly impacted by a 398 basis points increase in the average yield to 4.89% for the year ended December 31, 2023 as compared to 0.91% for the year ended December 31, 2022. The increase in the average yield was primarily driven by an increase in market rates. The average balance of other interest earning assets increased from \$19.7 million for the year ended December 31, 2022 to \$36.9 million for the year ended December 31, 2023 due to the increase in cash from deposit growth, loan repayments, and the sale of securities during 2023.

Interest Expense. Interest expense increased \$7.0 million, or 289.1%, to \$9.4 million for the year ended December 31, 2023 compared to \$2.4 million for the year ended December 31, 2022 primarily due to an increase in interest paid on deposits. Interest paid on deposits increased by \$6.3 million, or 344.6%, to \$8.1 million for the year ended December 31, 2023 when compared to the year ended December 31, 2022. The increase in interest paid on deposits was primarily the result of a \$67.5 million increase in the average balance of time deposits, as well as a 206 basis points increase in the average rate paid on time deposit accounts. Interest paid on time deposits increased by \$4.8 million, or 398.6% during the year ended December 31, 2023 as compared to the prior year. The increase in the average rate paid on deposit accounts was primarily due to the increase in market interest rates and increased competition since December 31, 2022. Average deposit balances were \$486.1 million, a 2.9% increase during the year ended December 31, 2023, resulting from an increase in time deposits and brokered deposits since December 31, 2022.

During the year ended December 31, 2023, interest expense on borrowed funds and other interest-bearing liabilities increased by \$728,000, or 121.3%, compared to the year ended December 31, 2022, primarily due to a \$13.5 million increase in average borrowed funds and other interest-bearing liabilities outstanding. In addition, the cost of borrowed funds and other interest-bearing liabilities increased 105 basis points to 3.43% for the year ended December 31, 2023 as compared to the prior year. Interest expense on borrowed funds and other interest-bearing liabilities increased as we increased liquidity on the balance sheet.

(Credit) Provision for Credit Losses. We adopted the Current Expected Credit Losses (“CECL”) methodology to record expected credit losses on our loan portfolio and unfunded commitments effective January 1, 2023. The adoption of CECL under current accounting guidance resulted in a pre-tax increase to the allowance for credit losses on loans of \$282,000 and an increase to the allowance for credit losses on unfunded commitments of \$633,000, with an offset to retained earnings. A \$1.0 million (credit) provision for credit losses on loans and unfunded commitments was recorded during the year ended December 31, 2023 compared to a \$725,000 provision for the year ended December 31, 2022. The (credit) provision for credit losses during the year ended December 31, 2023 was primarily due to a decrease in commercial real estate, residential one- to four-family, and home equity loans during 2023, as well as a decrease in unfunded commitments that are not unconditionally cancellable during the year. The Company’s 2022 provision for loan losses was primarily due to general reserves set aside for loan growth and an increase in criticized and classified commercial real estate loans.

During the year ended December 31, 2023, we utilized the CECL methodology to record expected credit losses on our loan portfolio and unfunded commitments, which is estimated using relevant available information, from internal and

external sources, relating to past events, current conditions, and reasonable and supportable forecasts. We use the vintage model to estimate expected credit losses for all loan segments. We recorded a credit to the provision for credit losses of \$570,000 related to commercial real estate loans, which consisted of a \$436,000 credit attributable to a decrease in the segment's loan balance and a \$134,000 credit attributable to qualitative and forecasting factors, including trends in the nature and volume of the loan portfolio, loan concentrations, national and local economic conditions, as well as forecasted data related to unemployment rates and changes in forecasted gross domestic product (GDP). We also recorded a credit to the provision for credit losses for unfunded commitments of \$207,000 related to a decrease in loan commitments during 2023.

During the year ended December 31, 2022, the Company recorded a net provision of \$744,000 for commercial real estate and construction – commercial loans. This consisted of an \$816,000 general provision primarily to reflect the classification of two commercial real estate loans totaling \$8.6 million to substandard during the year ended December 31, 2022. It also included a \$197,000 general provision due to an increase in commercial real estate and construction – commercial loans during the year ended December 31, 2022, driven by organic loan growth in these loan categories. These provisions were partially offset by a \$269,000 recovery on previously impaired commercial real estate loans during the year ended December 31, 2022. A \$22,000 net credit provision was recorded for commercial business loans primarily due to a decrease in criticized and classified loans for this loan type and a decrease in commercial loan balances during the year ended December 31, 2022. A \$92,000 net provision was recorded for one-to four-family, home equity and consumer loans that primarily reflected adjustments to certain qualitative factors, net-charge offs and an increase in classified loans for these loan types during the year ended December 31, 2022. An \$89,000 credit provision was recorded for the unallocated category of loan losses to reflect the margin of imprecision inherent in the underlying assumptions used in the methodologies for estimating allocated and general losses in the loan portfolio.

Refer to Note 5 of the Notes to the Consolidated Financial Statements for additional details on the provision for credit losses.

Non-Interest Income. Non-interest income was \$2.6 million for the year ended December 31, 2023, a decrease of \$69,000, or 2.6%, as compared to the year ended December 31, 2022. The decrease was primarily due to a \$391,000 net decrease in unrealized gains on interest rate swap products as a result of market interest rate movements, a \$59,000 loss on the sale of securities in the current year to reposition the Bank's balance sheet, and a \$59,000 decrease in service charges and fees. These decreases were partially offset by a \$420,000 increase in earnings on bank-owned life insurance in connection with the restructuring of bank-owned life insurance during the fourth quarter of 2023, and a \$18,000 decrease in loss on sale of loans when compared to the year ended December 31, 2022.

Non-Interest Expense. Non-interest expense was \$21.8 million for the year ended December 31, 2023, an increase of \$2.4 million, or 12.2%, as compared to \$19.4 million for the year ended December 31, 2022 primarily due to an increase in the aggregate of professional services expense and salary and employee benefits expense of \$1.8 million, or 14.9%, as a result of performing remediation activities related to regulatory matters. Additionally, FDIC insurance expense increased by \$841,000, or 309.2%, during the year ended December 31, 2023 due to an increase in premium assessments related to regulatory matters. Data processing costs increased by \$323,000, or 22.7%, during the year ended December 31, 2023 primarily due to an increase in costs related to core system maintenance and enhancements to existing IT security protocols.

Income Taxes Expense. Income tax expense was \$1.4 million for the year ended December 31, 2023, an increase of \$237,000, or 20.4%, as compared to \$1.2 million for the year ended December 31, 2022. The increase in income tax expense was primarily due to the restructuring of bank-owned life insurance, which resulted in additional income tax expense of \$378,000. This increase was partially offset by a decrease in income before income taxes during the year ended December 31, 2023. The effective tax rate for the years ended December 31, 2023 and 2022 was 22.4% and 16.9%, respectively. The increase in the effective tax rate in 2023 was due to the aforementioned restructuring of the bank-owned life insurance.

Liquidity and Capital Resources

Liquidity describes our ability to meet the financial obligations that arise during the ordinary course of business. Liquidity is primarily needed to fund loan commitments, to pay the deposit withdrawal requirements of our customers as well as to fund current and planned expenditures. Our primary sources of funds consist of deposits, scheduled amortization and prepayments of loans and securities, maturities and sales of investments and loans, excess cash, interest earning deposits at other financial institutions and funds provided from operations. We have written agreements with the FHLBNY, which allows us to borrow the maximum lending values designated by the type of collateral pledged. As of December 31, 2023,

the maximum amount that we could borrow from the FHLB NY was \$36.8 million which was collateralized by certain fixed-rate residential, one-to-four-family loans in delivery. We can increase our maximum borrowing capacity by providing additional collateral in delivery. At December 31, 2023, we had outstanding advances under this agreement of \$35.3 million. We have a written agreement with the Federal Reserve Bank discount window for overnight borrowings which is collateralized by a pledge of our securities, and allows us to borrow up to the value of the securities pledged. At December 31, 2023 there were no securities pledged to the Federal Reserve Bank. At December 31, 2022 securities pledged to the FRB discount window was equal to a book value of \$14.4 million and fair value of \$12.2 million. There were no balances outstanding with the Federal Reserve Bank as of December 31, 2023 and 2022. We have also established lines of credits with correspondent banks for \$27.0 million, of which \$25.0 million is unsecured and the remaining \$2.0 million will be secured by a pledge of our securities when a draw is made. There were no borrowings on these lines as of December 31, 2023.

As a result of the Order previously disclosed herein, the Company's ability to access available sources of funds from the FHLB has been curtailed to short-term advances (i.e., 30 days or less) and the residential loans pledged as collateral for these borrowings are subject to reductions in value. The availability of lines of credit with one other correspondent bank was terminated, while the availability of lines of credit with other correspondent banks may also be reduced or eliminated. The Bank is not eligible to access the Bank Term Funding Program created by the Federal Reserve Board on March 12, 2023. The Bank is ineligible to participate in the program due to the Consent Order. The program ended on March 11, 2024. Lastly, the unsecured line of credit for our Master Account at the Federal Reserve has been withdrawn at this time.

While maturities and scheduled amortization of loans and securities are predictable sources of funds, deposit outflows, calls of investment securities, and prepayments of loans and mortgage-backed securities are strongly influenced by interest rates, general and local economic conditions, and competition in the marketplace. These factors reduce the predictability of the timing of these sources of funds.

Our primary investing activities include the origination of loans and the purchase of investment securities. For the year ended December 31, 2023, we originated loans of approximately \$56.3 million as compared to approximately \$157.2 million of loans originated during the year ended December 31, 2022. Principal repayments and other deductions exceeded loan originations in 2023 by \$17.9 million. There were no purchases of investment securities during the year ended December 31, 2023. Purchases of investment securities totaled \$6.1 million for the year ended December 31, 2022. Additionally during 2023, we purchased additional bank-owned life insurance of \$12.6 million, while surrendering \$7.2 million, to increase the yield on these assets. These activities were funded primarily through deposit growth, principal payments received on loans and securities, securities sales, borrowings and cash reserves.

As described elsewhere in this report, the Company has loan commitments to borrowers and borrowers have unused overdraft lines of protection, unused home equity lines of credit and unused commercial lines of credit that may require funding at a future date. The Company believes it has sufficient funds to fulfill these commitments, including sources of funds available through the use of FHLB NY advances or other liquidity sources. Total deposits were \$590.9 million at December 31, 2023, as compared to \$570.1 million at December 31, 2022. Approximately \$150.5 million of time deposit accounts are scheduled to mature within one year as of December 31, 2023. Based on our deposit retention experience, current pricing strategy, and competitive pricing policies, we anticipate that a significant portion of these time deposits will remain with us following their maturity.

We are committed to maintaining a strong liquidity position; therefore, we monitor our liquidity position on a daily basis. We anticipate that we will have sufficient funds to meet our current funding commitments. The marginal cost of new funding, however, whether from deposits or borrowings from the FHLB NY, will be carefully considered as we monitor our liquidity needs. Therefore, in order to maintain sufficient liquidity and manage our cost of funds, we may consider wholesale funding options in the future.

We do not anticipate any material capital expenditures in 2024. We do not have any balloon or other payments due on any long-term obligations, other than the borrowing agreements noted above.

Off-Balance Sheet Arrangements

Our off-balance sheet items include loan commitments as described in Note 16 in the notes to our consolidated financial statements. At December 31, 2023, we had loan commitments to borrowers of approximately \$21.0 million and overdraft lines of credit, unused home equity lines of credit, unused commercial lines of credit, and commercial and standby letters of credit of approximately \$76.9 million. We recorded an allowance for credit losses associated with these commitments of \$487,000 as of December 31, 2023. We do not have any other off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on our financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources that is material to investors.

Accounting Policies, Standards and Pronouncements

Refer to Note 2 in the notes to our consolidated financial statements for a discussion of significant accounting policies, the impact of the adoption of new accounting standards and recent accounting pronouncements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Disclosure not required for smaller reporting companies.

Item 8. Financial Statements and Supplementary Data.

See pages F – 1 through F – 51 following the signature page of this Annual Report on Form 10-K.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures designed to ensure that the information required to be disclosed in the reports that it files or submits under the Securities Exchange Act of 1934, as amended, are recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by an issuer in the reports that it files or submits under the Securities Exchange Act of 1934 is accumulated and communicated to the issuer's management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure. The Company's management, with the participation of its Principal Executive Officer and Principal Financial Officer, evaluated the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13(a)-15(e) and 15d-15(e) under the Securities Exchange Act of 1934) as of the end of the period covered by this report. Based upon such evaluation, the Principal Executive Officer and Principal Financial Officer have concluded that, as of the end of such period, the Company's disclosure controls and procedures were effective.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting for the Company. Our internal control over financial reporting is a process designed under the supervision of our Principal Executive Officer and Principal Financial Officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external purposes in accordance with U.S. generally accepted accounting principles.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become

inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management has made a comprehensive review, evaluation, and assessment of our internal control over financial reporting as of December 31, 2023. In making its assessment of internal control over financial reporting, management used the criteria issued by the Committee of Sponsoring Organizations of the Treadway Commission (“COSO”) in *Internal Control-Integrated Framework (2013)*. Based on that assessment, management concluded that, as of December 31, 2023, our internal control over financial reporting was effective.

This annual report does not include an attestation report of the Company’s independent registered public accounting firm regarding internal control over financial reporting pursuant to rules of the SEC that exempts the Company from such attestation and requires only management’s report.

Changes in Internal Control over Financial Reporting

There have not been any changes in the Company’s internal control over financial reporting (as such term is defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act of 1934) during the quarter ended December 31, 2023 to which this report relates that have materially affected, or are reasonably likely to materially affect, internal control over financial reporting.

Item 9B. Other Information.

During the fourth quarter of 2023, none of our directors or officers adopted or terminated any contract, instruction or written plan for the purchase or sale of Company securities that was intended to satisfy the affirmative defense conditions of Rule 10b5-1(c) or any “non-Rule 10b5-1 trading arrangement,” as that term is used in SEC regulations.

Item 9C. Disclosure Regarding Foreign Jurisdictions that Prevent Inspections.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by this item is incorporated herein by reference to our Proxy Statement for our 2024 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days of our December 31, 2023 fiscal year end.

Item 11. Executive Compensation.

The information required by this item is incorporated herein by reference to our Proxy Statement for our 2024 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days of our December 31, 2023 fiscal year end.

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

The information required by this item is incorporated herein by reference to our Proxy Statement for our 2024 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days of our December 31, 2023 fiscal year end.

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

The information required by this item is incorporated herein by reference to our Proxy Statement for our 2024 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days of our December 31, 2023 fiscal year end.

Item 14. Principal Accounting Fees and Services.

The information required by this item is incorporated herein by reference to our Proxy Statement for our 2024 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days of our December 31, 2023 fiscal year end.

PART IV

Item 15. Exhibits and Financial Statement Schedules.

15(a)(1) Financial Statements. The following are included in Item 8 of Part II of this Annual Report on Form 10-K.

- Report of Independent Registered Public Accounting Firm
- Consolidated Statements of Financial Condition as of December 31, 2023 and 2022
- Consolidated Statements of Income for the years ended December 31, 2023 and 2022
- Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2023 and 2022
- Consolidated Statements of Stockholders' Equity for the years ended December 31, 2023 and 2022
- Consolidated Statements of Cash Flows for the years ended December 31, 2023 and 2022
- Notes to Consolidated Financial Statements

15(a)(2) Financial Statement Schedules. Schedules are omitted because they are not required or the information is provided elsewhere in the Consolidated Financial Statements or Notes thereto included in Item 8 of Part II of this Annual Report on Form 10-K.

15(a)(3) Exhibits. The following exhibits are filed as part of this Annual Report on Form 10-K or are incorporated herein by reference.

3.1	<u>Charter of Lake Shore Bancorp, Inc.</u> ¹
3.2	<u>Amended and Restated Bylaws of Lake Shore Bancorp, Inc.</u> ²
4.1	<u>Form of Stock Certificate of Lake Shore Bancorp, Inc.</u> ³
4.2	<u>Form of Stock Option Certificate</u> ⁴
4.3	<u>Description of Common Stock</u> ⁵
10.1	<u>Amended and Restated Severance Pay Plan of Lake Shore Savings Bank</u> ⁶
10.2	<u>2015 Executives Supplemental Benefit Plan I</u> ⁷
10.3	<u>Amended and Restated 2015 Executives Supplemental Benefit Plan II</u> ⁸
10.4	<u>2015 Directors Supplemental Benefit Plan I</u> ⁹
10.5	<u>Amended and Restated 2015 Directors Supplemental Benefit Plan II</u> ¹⁰
10.6	<u>Lake Shore Bancorp, Inc. 2006 Stock Option Plan</u> ¹¹
10.7	<u>Amended and Restated 2017 Supplemental Executive Retirement Plan for Daniel P. Reininga</u> ¹²
10.8	<u>2015 Executives Supplemental Benefit Plan II amended and restated joinder agreement for Rachel A. Foley</u> ¹³
10.9	<u>2015 Executives Supplemental Benefit Plan II joinder agreement for Jeffery M. Werdein</u> ¹⁴
10.10	<u>Lake Shore Bancorp, Inc. 2012 Equity Incentive Plan</u> ¹⁵
10.11	<u>Retention Agreement between Lake Shore Savings Bank and Jeffrey Werdein</u> ¹⁶
10.12	<u>Consent Order</u> ¹⁷
10.13	<u>Written Agreement by and between Lake Shore, MHC, Lake Shore Bancorp, Inc. and the Federal Reserve Bank of Philadelphia, dated June 28, 2023</u> ¹⁸
21.1	<u>Subsidiaries of Lake Shore Bancorp, Inc.</u> [*]
23.1	<u>Consent of Baker Tilly US, LLP</u> [*]
31.1	<u>Certification by the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u> [*]
31.2	<u>Certification by the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002</u> [*]
32.1	<u>Certification by the Chief Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u> [*]
32.2	<u>Certification by the Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002</u> [*]
97	<u>Policy Relating to Recovery of Erroneously Awarded Compensation</u> [*]
101.INS	XBRL Instance Document [*]
101.SCH	XBRL Taxonomy Extension Schema Document [*]
101.CAL	XBRL Taxonomy Calculation Linkbase Document [*]
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document [*]
101.LAB	XBRL Taxonomy Label Linkbase Document [*]

^{*} Filed herewith.

- ¹ Incorporated herein by reference to the Exhibits to the Registration Statement on Form S-1, filed with the Securities and Exchange Commission on November 4, 2005 (Registration No. 333-129439).
- ² Incorporated herein by reference to Exhibit 3.2 to Form 8-K, filed with the Securities and Exchange Commission on November 1, 2023.
- ³ Incorporated herein by reference to the Exhibits to Amendment No. 2 to the Registration Statement on Form S-1/A, filed with the Securities and Exchange Commission on February 8, 2006 (Registration No. 333-129439).
- ⁴ Incorporated herein by reference to the Exhibits to the Registration Statement on Form S-8, filed with the Securities and Exchange Commission on April 3, 2007 (Registration No. 333-141829).
- ⁵ Incorporated herein by reference to Exhibit 4.4 to Form 10-K, filed with the Securities and Exchange Commission on March 27, 2020.
- ⁶ Incorporated herein by reference to the Exhibits to Form 8-K, filed with the Securities and Exchange Commission on November 16, 2007.
- ⁷ Incorporated herein by reference to Exhibit 10.5 to Form 10-K, filed with the Securities and Exchange Commission on March 25, 2016.
- ⁸ Incorporated herein by reference to Exhibit 10.6 to Form 10-K, filed with the Securities and Exchange Commission on March 25, 2016.
- ⁹ Incorporated herein by reference to Exhibit 10.7 to Form 10-K, filed with the Securities and Exchange Commission on March 25, 2016.
- ¹⁰ Incorporated herein by reference to Exhibit 10.8 to Form 10-K, filed with the Securities and Exchange Commission on March 25, 2016.
- ¹¹ Incorporated herein by reference to the Proxy Statement for our October 24, 2006 special meeting of shareholders filed with the Securities and Exchange Commission on September 7, 2006.
- ¹² Incorporated herein by reference to Exhibit 10.2 to Form 8-K, filed with the Securities and Exchange Commission on January 27, 2017.
- ¹³ Incorporated herein by reference to Exhibit 10.1 to Form 8-K, filed with the Securities and Exchange Commission on May 23, 2016.
- ¹⁴ Incorporated herein by reference to Exhibit 10.2 to Form 8-K, filed with the Securities and Exchange Commission on May 23, 2016.
- ¹⁵ Incorporated herein by reference to Appendix A to the Proxy Statement for our May 23, 2012 annual meeting of stockholders filed with the Securities and Exchange Commission on April 11, 2012.
- ¹⁶ Incorporated herein by reference to Exhibit 10.1 to Form 8-K, filed with the Securities and Exchange Commission on April 4, 2018.
- ¹⁷ Incorporated herein by reference to Exhibit 10.1 to Form 8-K, filed with the Securities and Exchange Commission on February 15, 2023.
- ¹⁸ Incorporated herein by reference to Exhibit 10.1 to Form 8-K, filed with the Securities and Exchange Commission on June 30, 2023.

Item 16. Form 10-K Summary.

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 22, 2024.

Lake Shore Bancorp, Inc.

By: /s/ Kim C. Liddell

Kim C. Liddell

President and Chief Executive Officer

Date: March 22, 2024

Pursuant to the requirements of the Securities Act of 1933, as amended, and any rules and regulations promulgated there under, this Annual Report on Form 10-K, has been signed by the following persons in the capacities and on the dates indicated.

Name	Title	Date
<u>/s/ Kim C. Liddell</u>	President and Chief Executive Officer (Principal Executive Officer)	March 22, 2024
Kim C. Liddell		
<u>/s/ Kevin M. Sanvidge</u>	Chairman of the Board	March 22, 2024
Kevin M. Sanvidge		
<u>/s/ Sharon E. Brautigam</u>	Vice Chairperson of the Board	March 22, 2024
Sharon E. Brautigam		
<u>/s/ Michelle M. DeBergalis</u>	Director	March 22, 2024
Michelle M. DeBergalis		
<u>/s/ John P. McGrath</u>	Director	March 22, 2024
John P. McGrath		
<u>/s/ Jack L. Mehlretter</u>	Director	March 22, 2024
Jack L. Mehlretter		
<u>/s/ Ronald J. Passafaro</u>	Director	March 22, 2024
Ronald J. Passafaro		
<u>/s/ Ann M. Segarra</u>	Director	March 22, 2024
Ann M. Segarra		
<u>/s/ Taylor M. Gilden</u>	Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)	March 22, 2024
Taylor M. Gilden		

Table of Contents

Financial Statements

Page

[Report of Independent Registered Public Accounting Firm](#) (PCAOB ID 23)

F - 2

[Consolidated Statements of Financial Condition](#)

F - 4

[Consolidated Statements of Income](#)

F - 5

[Consolidated Statements of Comprehensive Income \(Loss\)](#)

F - 6

[Consolidated Statements of Stockholders' Equity](#)

F - 7

[Consolidated Statements of Cash Flows](#)

F - 8

[Notes to Consolidated Financial Statements](#)

F - 9

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholders and Board of Directors of
Lake Shore Bancorp, Inc. and Subsidiary:

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of financial condition of Lake Shore Bancorp, Inc. and Subsidiary (Company) as of December 31, 2023 and 2022, the related consolidated statements of income, comprehensive income (loss), stockholders' equity, and cash flows for the years then ended, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2023 and 2022, and the results of its operations and its cash flows for the years then ended, in conformity with accounting principles generally accepted in the United States of America.

Change in Accounting Principle

As described in Note 2 to the Company's consolidated financial statements, the Company has changed its method of accounting for the recognition and measurement of the allowance for credit losses effective January 1, 2023 due to the adoption of ASC 326, Financial Instruments – Credit Losses.

Basis for Opinion

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

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

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

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the consolidated financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the consolidated financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinions on the critical audit matter or on the accounts or disclosures to which it relates.

Allowance for Credit Losses – Qualitative Factors and Economic Forecast Factor

Critical Audit Matter Description

As discussed in Notes 2 and 5 to the consolidated financial statements, the allowance for credit losses on loans and off balance sheet credit exposure is accounted for under ASC 326, Financial Instruments – Credit Losses. ASC 326 requires the measurement of expected credit losses over the estimated life of the existing loan portfolio.

The Company's allowance for credit losses on loans is measured on a collective (pool) basis when similar risk characteristics exist using the vintage model for all loan segments, adjusted for qualitative factors and an economic forecast factor components. Loans that do not share risk characteristics are evaluated on an individual basis. The vintage model measures the expected loss calculation for future periods based on historical performance by the origination period of loans with similar life cycles and risk characteristics. For each loan segment, the Company utilizes historical loss data through the current period to calculate the actual loss percentage for each loan type by vintage year of loan origination. The qualitative factors used by the Company include factors such as trends in nature and volume of loan portfolio, loan concentrations, changes in the experience, ability and depth of the Company's lending management, and national and local economic conditions. The economic forecast factor considers unemployment data and changes in gross domestic production to determine the impact on the Company's loan portfolio. The adjustments for qualitative factors and the economic forecast factor require a significant amount of judgment by management and involve a high degree of estimation uncertainty.

The Company's allowance for credit losses on off balance sheet credit exposure is derived through the use of the vintage model described above and a utilization rate concept, adjusted for the same qualitative factors and economic forecast factor as applied to loans.

We identified the qualitative factor and economic forecast factor components of the allowance for credit losses as a critical audit matter as auditing the underlying qualitative factors and economic forecast factor required significant auditor judgment as amounts determined by management rely on analysis that is highly subjective and includes significant estimation uncertainty.

How We Addressed the Matter in Our Audit

The primary procedures we performed to address this critical audit matter included, among others:

- Obtaining an understanding of the relevant controls related to the allowance for credit losses, including controls related to management's determination and review of the qualitative factors and the economic forecast factor, and the completeness and accuracy of the data used in determining the qualitative factors and the economic forecast factor.
- Testing of the completeness and accuracy of the data used by management in determining qualitative factor and the economic forecast factor adjustments by agreeing to internal and external source data.
- Testing of the mathematical accuracy of the allowance calculation, including the calculation of the qualitative factor and economic forecast factor components.
- Evaluating the reasonableness of management's conclusions regarding the appropriateness of the qualitative factor and economic forecast factor adjustments when compared to the underlying internal and external source data.

/s/ Baker Tilly US, LLP

We have served as the Company's auditor since 2005.

Pittsburgh, Pennsylvania
March 22, 2024

Lake Shore Bancorp, Inc. and Subsidiary
Consolidated Statements of Financial Condition

	December 31, 2023	December 31, 2022
	(Dollars in thousands, except share data)	
Assets		
Cash and due from banks	\$ 4,648	\$ 4,503
Interest earning deposits	49,082	5,130
Cash and Cash Equivalents	53,730	9,633
Securities	60,442	73,047
Federal Home Loan Bank stock, at cost	2,293	2,330
Loans receivable, net of allowance for credit losses of \$6,463 in 2023 and \$7,065 in 2022	555,828	573,537
Premises and equipment, net	7,870	8,286
Accrued interest receivable	2,835	2,796
Bank-owned life insurance	29,355	23,218
Other assets	12,765	7,067
Total Assets	\$ 725,118	\$ 699,914
Liabilities and Stockholders' Equity		
Liabilities		
Deposits:		
Interest bearing	\$ 495,738	\$ 464,441
Non-interest bearing	95,186	105,678
Total Deposits	590,924	570,119
Short-term borrowings	—	12,596
Long-term debt	35,250	24,950
Advances from borrowers for taxes and insurance	3,307	3,308
Other liabilities	9,364	7,757
Total Liabilities	638,845	618,730
Stockholders' Equity		
Common stock, \$0.01 par value per share, 25,000,000 shares authorized; 6,836,514 shares issued and 5,686,288 shares outstanding at December 31, 2023 and 6,836,514 shares issued and 5,705,225 shares outstanding at December 31, 2022	68	68
Additional paid-in capital	31,456	31,459
Treasury stock, at cost (1,150,226 shares at December 31, 2023 and 1,131,289 shares at December 31, 2022)	(13,760)	(13,571)
Unearned shares held by ESOP	(1,023)	(1,108)
Unearned shares held by compensation plans	(39)	(191)
Retained earnings	78,956	74,859
Accumulated other comprehensive loss	(9,385)	(10,332)
Total Stockholders' Equity	86,273	81,184
Total Liabilities and Stockholders' Equity	\$ 725,118	\$ 699,914

See notes to consolidated financial statements.

Lake Shore Bancorp, Inc. and Subsidiary
Consolidated Statements of Income

	Years Ended December 31,	
	2023	2022
	(Dollars in thousands, except per share data)	
Interest Income		
Loans, including fees	\$ 30,009	\$ 24,507
Investment securities, taxable	898	823
Investment securities, tax-exempt	1,043	1,245
Other	1,805	179
Total Interest Income	33,755	26,754
Interest Expense		
Deposits	8,069	1,815
Short-term borrowings	87	49
Long-term debt	1,191	494
Other	50	57
Total Interest Expense	9,397	2,415
Net Interest Income	24,358	24,339
(Credit) Provision for Credit Losses	(1,043)	725
Net Interest Income After (Credit) Provision for Credit Losses	25,401	23,614
Non-Interest Income		
Service charges and fees	1,045	1,104
Debit card fees	846	846
Increase in cash surrender value of bank-owned life insurance	761	341
Unrealized gain (loss) on equity securities	11	(11)
Unrealized (loss) gain on interest rate swap	(58)	332
Recovery on previously impaired investment securities	7	15
Loss on sale of securities available for sale	(59)	—
Net loss on sale of loans	—	(18)
Other	82	95
Total Non-Interest Income	2,635	2,704
Non-Interest Expense		
Salaries and employee benefits	11,254	9,854
Occupancy and equipment	2,911	3,054
Professional services	2,489	2,108
Data Processing	1,745	1,422
Advertising	578	714
Postage and Supplies	261	266
FDIC Insurance	1,113	272
Other	1,466	1,758
Total Non-Interest Expense	21,817	19,448
Income before Income Taxes	6,219	6,870
Income Tax Expense	1,399	1,162
Net Income	\$ 4,820	\$ 5,708
Basic and diluted earnings per common share	\$ 0.82	\$ 0.97
Dividends declared per share	\$ —	\$ 0.68

See notes to consolidated financial statements.

Lake Shore Bancorp, Inc. and Subsidiary
Consolidated Statements of Comprehensive Income (Loss)

	Years Ended December 31,	
	2023	2022
	(Dollars in thousands)	
Net Income	\$ 4,820	\$ 5,708
Other Comprehensive Income (Loss), net of tax (expense) benefit:		
Unrealized holding gains (losses) on securities available for sale, net of tax (expense) benefit	905	(11,298)
Reclassification adjustments related to:		
Recovery on previously impaired investment securities included in net income, net of tax expense	(5)	(12)
Net loss on sale of securities included in net income, net of tax benefit	47	—
Total Other Comprehensive Income (Loss)	947	(11,310)
Total Comprehensive Income (Loss)	<u>\$ 5,767</u>	<u>\$ (5,602)</u>

See notes to consolidated financial statements.

Lake Shore Bancorp, Inc. and Subsidiary
Consolidated Statements of Stockholders' Equity
Years Ended December 31, 2023 and 2022

	Common Stock	Additional Paid-In Capital	Treasury Stock	Unearned Shares Held by ESOP	Unearned Shares Held by Compensation Plans	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total
(Dollars in thousands, except share and per share data)								
Balance - January 1, 2022	\$ 68	\$ 31,350	\$ (13,660)	\$ (1,194)	\$ (157)	\$ 70,591	\$ 978	\$ 87,976
Net income	—	—	—	—	—	5,708	—	5,708
Other comprehensive loss, net of tax benefit of \$3,007	—	—	—	—	—	—	(11,310)	(11,310)
ESOP shares earned (7,935 shares)	—	24	—	86	—	—	—	110
Compensation plan shares granted (29,132 shares)	—	—	274	—	(274)	—	—	—
Compensation plan shares forfeited (10,616 shares)	—	—	(100)	—	100	—	—	—
Compensation plan shares earned (14,911 shares)	—	85	—	—	140	—	—	225
Purchase of treasury stock, at cost (5,701 shares)	—	—	(85)	—	—	—	—	(85)
Cash dividends declared (\$0.68 per share)	—	—	—	—	—	(1,440)	—	(1,440)
Balance - December 31, 2022	<u>\$ 68</u>	<u>\$ 31,459</u>	<u>\$ (13,571)</u>	<u>\$ (1,108)</u>	<u>\$ (191)</u>	<u>\$ 74,859</u>	<u>\$ (10,332)</u>	<u>\$ 81,184</u>
	Common Stock	Additional Paid-In Capital	Treasury Stock	Unearned Shares Held by ESOP	Unearned Shares Held by Compensation Plans	Retained Earnings	Accumulated Other Comprehensive Loss	Total
(Dollars in thousands, except share and per share data)								
Balance - January 1, 2023	\$ 68	\$ 31,459	\$ (13,571)	\$ (1,108)	\$ (191)	\$ 74,859	\$ (10,332)	\$ 81,184
Cumulative change in accounting principle (Note 2)	—	—	—	—	—	(723)	—	(723)
Net income	—	—	—	—	—	4,820	—	4,820
Other comprehensive income, net of tax expense of \$251	—	—	—	—	—	—	947	947
ESOP shares earned (7,935 shares)	—	1	—	85	—	—	—	86
Compensation plan shares granted (8,282 shares)	—	—	78	—	(78)	—	—	—
Compensation plan shares forfeited (22,296 shares)	—	—	(209)	—	209	—	—	—
Compensation plan shares earned, net of forfeitures (2,102 shares)	—	(4)	—	—	21	—	—	17
Common stock repurchased on vesting for payroll taxes (4,923 shares)	—	—	(58)	—	—	—	—	(58)
Balance - December 31, 2023	<u>\$ 68</u>	<u>\$ 31,456</u>	<u>\$ (13,760)</u>	<u>\$ (1,023)</u>	<u>\$ (39)</u>	<u>\$ 78,956</u>	<u>\$ (9,385)</u>	<u>\$ 86,273</u>

See notes to consolidated financial statements.

Lake Shore Bancorp, Inc. and Subsidiary
Consolidated Statements of Cash Flows

	Years Ended December 31,	
	2023	2022
	(Dollars in thousands)	
CASH FLOWS FROM OPERATING ACTIVITIES		
Net income	\$ 4,820	\$ 5,708
Adjustments to reconcile net income to net cash provided by operating activities:		
Net amortization of investment securities	60	89
Net amortization of deferred loan costs	552	490
(Credit) provision for credit losses	(1,043)	725
Recovery on previously impaired investment securities	(7)	(15)
Unrealized (gain) loss on equity securities	(11)	11
Unrealized loss (gain) on interest rate swap	58	(332)
Loss on sale of investment securities	59	—
Originations of loans held for sale	—	(1,309)
Proceeds from sales of loans held for sale	—	1,291
Loss on sale of loans held for sale	—	18
Depreciation and amortization	807	856
Deferred income tax expense (benefit)	17	(187)
Increase in cash surrender value of bank-owned life insurance	(761)	(341)
ESOP shares committed to be released	86	110
Stock based compensation expense	17	225
Increase in accrued interest receivable	(39)	(313)
Decrease in other assets	534	802
Writedowns of foreclosed real estate	16	15
Gains from sale of foreclosed real estate	(15)	(93)
Increase in other liabilities	1,055	455
Net Cash Provided by Operating Activities	6,205	8,205
CASH FLOWS FROM INVESTING ACTIVITIES		
Activity in debt securities:		
Sales	9,719	—
Maturities, prepayments and calls	3,983	7,508
Purchases	—	(6,141)
Purchases of Federal Home Loan Bank Stock	(1,314)	(1,692)
Redemptions of Federal Home Loan Bank Stock	1,351	968
Loan principal collections and originations, net	17,858	(57,762)
Proceeds from the surrender of bank-owned life insurance	635	—
Purchase of bank-owned life insurance	(12,596)	—
Proceeds from sale of interest rate swaps	214	—
Proceeds from sale of foreclosed real estate	64	321
Additions to premises and equipment	(391)	(406)
Net Cash Provided by (Used in) Investing Activities	19,523	(57,204)
CASH FLOWS FROM FINANCING ACTIVITIES		
Net increase (decrease) in deposits	20,805	(23,065)
Net (decrease) increase in advances from borrowers for taxes and insurance	(1)	110
Net (decrease) increase in short-term borrowings	(12,596)	12,596
Proceeds from issuance of long-term debt	15,250	5,000
Repayment of long-term debt	(4,950)	(2,000)
Repayment of finance lease obligation	(81)	(69)
Purchase of treasury stock	(58)	(85)
Cash dividends paid	—	(1,440)
Net Cash Provided by (Used in) Financing Activities	18,369	(8,953)
Net Increase (Decrease) in Cash and Cash Equivalents	44,097	(57,952)
CASH AND CASH EQUIVALENTS - BEGINNING	9,633	67,585
CASH AND CASH EQUIVALENTS - ENDING	\$ 53,730	\$ 9,633
SUPPLEMENTARY CASH FLOWS INFORMATION		
Interest paid	\$ 8,634	\$ 2,404
Income taxes paid	\$ 1,321	\$ 975
SUPPLEMENTARY SCHEDULE OF NONCASH INVESTING AND FINANCING ACTIVITIES		
Life insurance receivable	\$ 6,585	\$ —
Foreclosed real estate acquired in settlement of loans	\$ 60	\$ 216

Lake Shore Bancorp, Inc. and Subsidiary

Notes to Consolidated Financial Statements

Note-1 - Organization and Nature of Operations

Organizational Structure

Lake Shore Bancorp, Inc. (the “Company,” “us,” “our,” or “we”) and the parent mutual holding company, Lake Shore, MHC (the “MHC”) were formed on April 3, 2006 to serve as the stock holding companies for Lake Shore Savings Bank (the “Bank”) as part of the Bank’s conversion and reorganization from a New York State chartered mutual savings and loan association to the federal mutual holding company form of organization.

The MHC, whose activity is not included in these consolidated financial statements, held 3,636,875 shares, or 63.96% of the Company’s outstanding common stock as of December 31, 2023. As of December 31, 2023, the MHC elected to waive dividends of approximately \$18.6 million on a cumulative basis. The dividends waived by the MHC are considered a restriction on the retained earnings of the Company.

Charter

Lake Shore Bancorp, Inc. and the parent mutual holding company, Lake Shore, MHC are federally chartered and regulated by the Federal Reserve Board. Lake Shore Savings Bank, subsidiary of Lake Shore Bancorp, Inc., is a federally chartered savings bank and regulated by the Office of the Comptroller of the Currency (the “OCC”).

Nature of Business

The Company’s primary business is the ownership and operation of its subsidiary, the Bank. The Bank is engaged primarily in the business of retail banking through eleven branch offices located in Erie and Chautauqua Counties of New York State. Its primary deposit products are checking, savings and term certificate accounts and its primary lending products are commercial real estate loans and residential mortgages.

Note-2 - Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements include the accounts of the Company and the Bank. All material inter-company accounts and transactions have been eliminated. The accompanying consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America (“GAAP”). Certain prior periods amounts have been reclassified to conform to the current presentation. These reclassifications had no effect on 2022 net income.

Use of Estimates

To prepare these consolidated financial statements in conformity with GAAP, management of the Company made a number of estimates and assumptions relating to the reporting of assets and liabilities and the reporting of revenue and expenses. Actual results could differ from those estimates. Material estimates that are particularly susceptible to significant change in the near term relate to the determination of the allowance for credit losses, securities valuation estimates, and income taxes.

Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, amounts due from banks, interest earning deposits at other financial institutions and overnight federal funds sold which are generally sold for one to three-day periods.

Investment Securities

All debt securities are classified as available for sale and are carried at fair value with unrealized gains and losses, net of the related deferred income tax effect, excluded from earnings and reported as a separate component of accumulated other comprehensive income (loss) until realized. Equity securities are also measured at fair value with changes in the fair value recognized in the non-interest income component of the consolidated statements of income. Realized gains and losses on securities transactions are reported in earnings and computed using the specific identification method.

An allowance for credit losses is deducted from the amortized cost basis of financial assets to present the net carrying value at the amount that is expected to be collected over the contractual term. For available-for-sale debt securities in an unrealized loss position, the Company first assesses whether it intends to sell, or if it is more likely than not that it will be required to sell the security before the recovery of its amortized cost basis. If either of the criteria regarding intent or requirement to sell is met, the security's amortized cost basis is written down to fair value through income. For available-for-sale debt securities that do not meet the aforementioned criteria, the Company evaluates whether the decline in fair value has resulted from credit losses or other factors. In making this assessment, management considers the extent to which fair value is less than amortized cost, any changes to the rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. If this assessment indicates that a credit loss exists, the present value of cash flows expected to be collected from the security are compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, any excess cost is recorded as an allowance for credit losses. Any impairment that has not been recorded through an allowance for credit losses is recognized in other comprehensive income. The Company elected the practical expedient of zero loss estimates for securities issued by U.S. government entities and agencies. These securities are either explicitly or implicitly guaranteed by the U.S. government, are highly rated by major agencies and have a long history of no losses.

Accrued interest of \$260,000 as of December 31, 2023 on available-for-sale debt securities is included in accrued interest receivable on the consolidated statements of financial condition and is excluded from the estimate of credit losses.

Federal Home Loan Bank Stock

Federal law requires a member institution of the Federal Home Loan Bank ("FHLB") system to hold restricted stock of its district Federal Home Loan Bank according to a predetermined formula. This stock is restricted in that it can only be sold to the FHLB or to another member institution and all sales of FHLB stock must be at par. As a result of these restrictions, FHLB stock is carried at cost on the consolidated statements of financial condition. The investment is periodically evaluated for impairment based on the ultimate recoverability of cost.

Loans Receivable

Loans receivable that management has the intent and ability to hold until maturity or payoff are stated at their outstanding unpaid principal balances, net of allowance for credit losses and any deferred fees and costs. Interest income is accrued on the unpaid principal balance. Loan origination fees and costs are deferred and recognized as an adjustment of the yield (interest income) of the related loans. The Company is generally amortizing these amounts over the contractual life of the loan.

Management considers a loan to be in delinquency status when the contractual payment of principal or interest has become greater than 30 days past due. The accrual of interest is generally discontinued when the contractual payment of principal or interest has become 90 days past due or management has serious doubts about further collectability of principal or interest, even though the loan is currently performing. A loan may remain on accrual status if it is in the process of collection and is either guaranteed or well secured. When a loan is placed on non-accrual status, unpaid interest credited to income is reversed in the current year. Interest received on non-accrual loans generally is either applied against principal or reported as interest income, according to management's judgment as to the collectability of principal. Generally, loans are restored to accrual

status when the obligation is brought current, has performed in accordance with the contractual terms for a reasonable period of time, and the ultimate collectability of the total contractual principal and interest is no longer in doubt.

Allowance for Credit Losses - Loans

The allowance for credit losses is a valuation account that is deducted from or added to the loans receivable amortized cost basis to present the net amount expected to be collected on the loans. Loans are charged off against the allowance for credit losses when management believes the uncollectibility of a loan balance is confirmed. Expected recoveries recorded in the allowance for credit loss account should not exceed the aggregate of amounts previously charged-off and expected to be charged-off.

Management estimates the allowance for credit losses balance using relevant available information, from internal and external sources, relating to past events, current conditions, and reasonable and supportable forecasts. Historical credit loss experience provides the basis for the estimation of expected credit losses. Adjustments to historical information are made for differences in current loan-specific risk characteristics such as differences in underwriting standards, portfolio mix, delinquency level, or term as well as for changes in environmental conditions, such as change in unemployment rates, property values or other relevant factors. Changes in the allowance for credit losses on loans are recorded as a provision for (or credit to) credit losses.

The Company uses the vintage model to estimate expected credit losses for all loan segments. The vintage model measures the expected loss calculation for future periods based on the historical performance by the origination period of loans with similar life cycles and risk characteristics. For each loan segment, the Company utilizes historical loss data through the current period to calculate the actual loss percentage for each loan type by vintage year of loan origination. The calculated loss percentages are then applied to the remaining outstanding balance for each vintage year, for the estimated remaining life of the loans in the loan segment. In addition to this calculation, the Company applies qualitative factors for current conditions, including trends in the nature and volume of the loan portfolio, loan concentrations, changes in the experience, ability and depth of the Company's lending management, and national and local economic conditions. In addition, the Company utilizes an economic forecast factor consisting of unemployment data and changes in gross domestic production (GDP) to determine the impact to the Bank's loan portfolio. No reversion adjustments were necessary for our calculation as the starting point for the Company's estimate was a cumulative loss rate covering the expected contractual term of the loan portfolio.

The allowance for credit losses is measured on a collective (pool) basis when similar risk characteristics exist. Loans that do not share risk characteristics are evaluated on an individual basis. Loans evaluated individually are not included in the collective evaluation. When management determines that foreclosure is probable, expected credit losses are based on the fair value of the collateral at the reporting date, adjusted for selling costs as appropriate.

Accrued interest on loans of \$2.5 million at December 31, 2023 is included in accrued interest receivable on the consolidated statements of financial condition and is excluded from the estimate of credit losses.

The Company's determination as to the amount of expected credit losses are subject to review by bank regulators, which can require the establishment of additional expected credit losses. Although the allowance for credit losses is allocated by loan type, the allowance for credit losses is general in nature and is available to offset losses from any loan in the Company's portfolio.

Allowance for Credit Losses – Off Balance Sheet Credit Exposure

The Company estimates expected credit losses over the contractual period in which the Company is exposed to credit risk via a contractual obligation to extend credit, unless the obligation is unconditionally cancellable by the Company. Off-balance sheet credit exposure includes loan commitments in which the Company has extended terms and all parties have accepted. The Company's commercial overdraft line of credit and consumer overdraft line of credit products are unconditionally cancellable by the Company and therefore, the Company does not record an allowance for credit losses on these loan types. The allowance for credit losses for off balance sheet credit exposure is derived through the use of the vintage model and a utilization rate concept, applied to those commitments which are not unconditionally cancellable.

Changes in the allowance for credit losses for unfunded commitments are recorded as a provision for (or credit to) credit losses.

Premises and Equipment

Land is carried at cost. Buildings, improvements, furniture and equipment are carried at cost, net of accumulated depreciation. Depreciation is computed on the straight-line basis over the estimated useful lives of assets (generally thirty-nine years for buildings and three to fifteen years for furniture and equipment). Leasehold improvements are amortized on the straight-line method over the lesser of the life of the improvements or the lease term. Maintenance and repairs are charged to expense as incurred, while major improvements are capitalized and amortized to operating expense over the identified useful life.

Leases

The Company determines if an arrangement is a lease at the contract's inception. Leases will be classified as finance or operating, with classification affecting the pattern and classification of expense recognition in the consolidated statements of income. Operating leases are recorded under a right of use ("ROU") model that requires a lessee to record (for all operating leases with terms longer than 12 months) an asset representing its right to use the underlying asset and a lease liability. The ROU asset and lease liability are included in other assets and other liabilities, respectively, on the consolidated statements of financial condition. Finance leases are recorded in premises and equipment on the consolidated statements of financial condition.

Operating lease ROU assets represent our right to use an underlying asset during the lease term and operating lease liabilities represent our obligation to make lease payments arising from the lease. ROU assets and operating lease liabilities are recognized at lease commencement based on the present value of the remaining lease payments using a discount rate that represents our incremental borrowing rate at the lease commencement date. ROU assets are further adjusted for lease incentives. Operating lease expense, which is comprised of amortization of the ROU asset and the implicit interest accreted on the operating lease liability, is recognized on a straight-line basis over the lease term, and is recorded in occupancy and equipment expense in the consolidated statements of income.

Mortgage Servicing Rights

Certain low-yielding, fixed rate residential, one to- four- family loans are sold on the secondary market in order to manage interest rate risk. The individual loans are normally sold to an investor immediately after loan closing. The Company retains servicing rights on these loans.

Originated mortgage servicing rights are recorded at their fair value at the time of transfer of the related loans and are amortized in proportion to, and over the period of, estimated net servicing income or loss. The carrying value of the originated mortgage servicing rights are periodically evaluated for impairment. The mortgage servicing rights asset is recorded in other assets on the consolidated statements of financial condition. The amortization of the mortgage servicing asset is recorded against service fee income and recorded in service charges and fees on the consolidated statements of income.

Transfers of Financial Assets

Transfers of financial assets are accounted for as sales, when control over the assets has been surrendered. Control over transferred assets is deemed to be surrendered when (1) the assets have been isolated from the Company, (2) the transferee obtains the right (free of conditions that constrain it from taking advantage of that right) to pledge or exchange the transferred assets, and (3) the Company does not maintain effective control over the transferred assets through an agreement to repurchase them before their maturity.

Foreclosed Real Estate

Foreclosed real estate consists of property acquired in settlement of loans which is carried at its fair value less estimated selling costs. Write-downs from cost to fair value less estimated selling costs are recorded at the date of acquisition or

repossession and are charged to the allowance for loan losses. Subsequent write-downs to fair value, net of estimated selling costs, are recorded in non-interest expense along with direct operating expenses. Gains or losses not previously recognized, resulting from the sale of foreclosed assets are recognized in non-interest expense on the date of sale.

Foreclosed real estate was \$34,000 and \$95,000 at December 31, 2023 and 2022, respectively, and was included as a component of other assets in the consolidated statements of financial condition. Proceeds from the sale of foreclosed real estate for the years ended December 31, 2023 and 2022 were \$64,000 and \$321,000, respectively. This resulted in a net gain on sale of \$15,000 and \$93,000 for the years ended December 31, 2023 and 2022, respectively, and was included as a component of other non-interest expense in the consolidated statements of income.

Bank Owned Life Insurance

The Company invests in bank owned life insurance (“BOLI”) as a source of funding for employee benefit obligations. BOLI involves the purchase of life insurance by the Company on a chosen group of employees. The Company is the owner and beneficiary of the policies. This life insurance investment is carried at the cash surrender value of the underlying policies. Income from the increase in the cash surrender value of the underlying policies is included in non-interest income in the consolidated statements of income and is not subject to income taxes unless surrendered. The Company does not intend to surrender the policies held at December 31, 2023, and accordingly, no deferred taxes have been recorded on the earnings from these policies. The cash surrender value of such bank owned life insurance amounted to \$29.4 million at December 31, 2023 and \$23.2 million at December 31, 2022.

Advertising Costs

The Company follows the policy of charging the costs of advertising to expense as incurred. Total advertising expense for the years ended December 31, 2023 and 2022 was \$578,000 and \$714,000, respectively.

Income Taxes

The Company files a consolidated federal income tax return. The provision for federal and state income taxes is based on income reported on the consolidated financial statements, rather than the amounts reported on the respective income tax returns. Deferred taxes are recorded using the liability method whereby deferred tax assets are recognized for deductible temporary differences and deferred tax liabilities are recognized for taxable temporary differences. Temporary differences are the differences between the reported amounts of assets and liabilities and their tax basis. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates on the date of enactment and the effect of a change in tax rates is recognized in income at that time.

The Company makes certain estimates and judgments in determining income tax expense for financial statement purposes. These estimates and judgments are applied in the calculation of certain tax credits and in the calculation of deferred income tax expense or benefit associated with certain deferred tax assets and liabilities. Significant changes to these estimates may result in an increase or decrease to the Company’s tax provision in a subsequent period. The Company recognizes interest and/or penalties related to income tax matters in income tax expense.

The Company periodically reviews its tax positions and applies a “more likely than not” recognition threshold for all tax uncertainties. The amount recognized is the largest amount of tax benefit that is greater than 50% likely of being realized on examination. For tax positions not meeting the “more likely than not” test, no tax benefit is recorded.

Employee Stock Ownership Plan (“ESOP”)

Compensation expense is recognized based on the current market price of shares committed to be released to employees. All shares released and committed to be released are deemed outstanding for purposes of earnings per share calculations. Dividends declared and paid on allocated shares held by the ESOP are charged to retained earnings. The value of unearned shares to be allocated to ESOP participants for future services not yet performed is reflected as a reduction of stockholders’ equity. Dividends declared on unallocated shares held by the ESOP are recorded as a reduction of the ESOP’s loan payment to the Company.

Stock Compensation Plans

At December 31, 2023, the Company had stock-based employee and non-employee compensation plans, which are described more fully in Note 12 - Stock-based Compensation. The Company accounts for the plans using a fair value-based method, which measures compensation cost at the grant date based on the fair value of the award. Compensation is then recognized over the service period, which is usually the vesting period. The fair value of stock option grants are estimated on the date of grant using the Black-Scholes options-pricing model. Common shares are issued from the Company's authorized common shares when a share option is exercised. When restricted shares are granted, the shares are released from treasury stock. Common shares awarded as restricted stock are measured based on the fair market value at the grant date. The stock option plan, restricted stock plan and equity incentive plan expenses are recognized in salaries and employee benefits expense on the consolidated statement of income.

Earnings per Common Share

Basic earnings per share is computed by dividing net income by the weighted average number of common shares outstanding, less unallocated shares held by the Company's ESOP, 2006 Recognition and Retention Plan ("RRP") and 2012 Equity Incentive Plan ("EIP"), during the period. Diluted earnings per share reflects additional common shares that would have been outstanding if dilutive potential common shares had been issued, as well as any adjustment to income that would result from the assumed conversion. Potential common shares that may be issued by the Company relate solely to outstanding stock options and restricted stock awards, and are determined using the treasury stock method.

Off-Balance Sheet Credit Related Financial Instruments

In the ordinary course of business, the Company has entered into commitments to extend credit. Such commitments are recorded in the consolidated statements of financial condition when they are funded.

Comprehensive Income (Loss)

Accounting principles generally require that recognized revenue, expenses, gains, and losses be included in net income. Although certain changes in assets and liabilities, such as unrealized gains and losses on available for sale securities, are reported as a separate component of the stockholders' equity section of the consolidated statements of financial condition, such items, along with net income, are components of comprehensive income (loss).

Subsequent Events

The Company evaluated events occurring subsequent to December 31, 2023 through the date the consolidated financial statements are being issued, and other than as set forth in Note 21, did not identify any subsequent events requiring disclosure.

Recently Adopted Accounting Standards

On January 1, 2023, the Company adopted the Financial Accounting Standards Board ("FASB") Accounting Standard Update ("ASU") 2016-13, *"Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments"* ("ASU 2016-13"), as amended. ASU 2016-13 (also known as Accounting Standard Codification 326 or "ASC 326") replaced the incurred loss methodology with an expected loss methodology that is referred to as the current expected credit loss ("CECL") methodology. The measurement of expected credit losses under the CECL methodology is applicable to financial assets measured at amortized cost, including loans receivable. It also applies to certain off-balance sheet credit exposures, such as loan commitments and standby letters of credit. In addition, ASU 2016-13 updated the accounting for available-for-sale debt securities to require credit losses to be presented as an allowance rather than a write-down on available-for-sale debt securities that management does not intend to sell or believes that it is more likely than not they will be required to sell. The Company utilized the modified retrospective method for all financial assets measured at amortized cost, specifically loans receivable and off-balance sheet credit exposures. Upon adoption on January 1, 2023, the Company recorded a \$282,000 increase to the allowance for credit losses related to the expected credit losses inherent within the Company's loan portfolio and a \$633,000 increase to the allowance for credit losses inherent within the Company's

off-balance sheet credit exposures, offset by a \$192,000 increase to deferred tax assets relating to the additional expected loss. As a result, retained earnings decreased by \$723,000.

The Company adopted ASC 326 using the prospective transition appropriate for available-for-sale debt securities for which other-than-temporary impairment had been recognized prior to January 1, 2023. As a result, the amortized cost basis remains the same before and after the effective date of ASC 326. The effective interest rate on the debt securities was not changed. Recoveries of amounts previously written-off relating to improvements in cash flows after January 1, 2023 will be recorded in earnings as received.

In March 2022, the FASB issued ASU No. 2022-02, "*Financial Instruments – Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures*." This ASU eliminates the separate recognition and measurement guidance for Troubled Debt Restructurings by creditors. The amendments in this update require the Company to apply the general loan modification guidance in Subtopic 310-20 to all loan modifications, including modifications for borrowers experiencing financial difficulty. The Company must evaluate whether the modification represents a new loan or a continuation of an existing loan. ASU 2022-02 may be adopted prospectively for loan modifications after adoption or on a modified retrospective basis, which would apply to loans previously modified, resulting in a cumulative effect adjustment to retained earnings in the period of adoption for changes in the allowance for credit losses. On January 1, 2023, the Company adopted ASU 2022-02 utilizing the prospective method, which did not have a material impact on its consolidated financial statements. The adoption of ASU-2022-02 also required the Company to enhance the vintage disclosures to include gross charge-off by year of origination.

Note 3 – Investment Securities

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

	December 31, 2023			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(Dollars in thousands)			
SECURITIES				
Debt Securities Available for Sale				
U.S. government agencies	\$ 2,007	\$ —	\$ (133)	\$ 1,874
Municipal bonds	40,774	—	(7,724)	33,050
Mortgage-backed securities:				
Collateralized mortgage obligations-private label	10	—	—	10
Collateralized mortgage obligations-government sponsored entities	11,844	1	(1,445)	10,400
Government National Mortgage Association	57	—	(2)	55
Federal National Mortgage Association	11,872	1	(1,684)	10,189
Federal Home Loan Mortgage Corporation	5,737	2	(926)	4,813
Asset-backed securities-private label	—	31	—	31
Asset-backed securities-government sponsored entities	2	—	—	2
Total Debt Securities Available for Sale	\$ 72,303	\$ 35	\$ (11,914)	\$ 60,424
Equity Securities	22	—	(4)	18
Total Securities	\$ 72,325	\$ 35	\$ (11,918)	\$ 60,442

	December 31, 2022			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(Dollars in thousands)			
SECURITIES				
Debt Securities Available for Sale				
U.S. government agencies	\$ 2,008	\$ —	\$ (175)	\$ 1,833
Municipal bonds	50,734	16	(8,336)	42,414
Mortgage-backed securities:				
Collateralized mortgage obligations-private label	12	—	(1)	11
Collateralized mortgage obligations-government sponsored entities	13,790	1	(1,636)	12,155
Government National Mortgage Association	61	—	(2)	59
Federal National Mortgage Association	13,232	1	(1,987)	11,246
Federal Home Loan Mortgage Corporation	6,277	—	(1,056)	5,221
Asset-backed securities-private label	—	96	—	96
Asset-backed securities-government sponsored entities	4	—	—	4
Total Debt Securities Available for Sale	\$ 86,118	\$ 114	\$ (13,193)	\$ 73,039
Equity Securities				
	22	—	(14)	8
Total Securities	\$ 86,140	\$ 114	\$ (13,207)	\$ 73,047

Debt Securities

All of our collateralized mortgage obligations are backed by one- to four-family residential mortgages.

At December 31, 2023, no securities were pledged as collateral to the Federal Reserve Bank (“FRB”), and at December 31, 2022 thirty-eight municipal bonds with a cost of \$14.4 million and fair value of \$12.2 million were pledged under a collateral agreement with the FRB of New York for liquidity borrowing. In addition, at December 31, 2023 and December 31, 2022, sixteen and twenty-two municipal bonds with a cost of \$4.9 million and \$6.6 million and fair value of \$3.7 million and \$5.6 million, respectively, were pledged as collateral for customer deposits in excess of the Federal Deposit Insurance Corporation (“FDIC”) insurance limits.

The following table sets forth the Company’s investment in securities with gross unrealized losses of less than twelve months and gross unrealized losses of twelve months or more and associated fair values as of the dates indicated:

	Less than 12 months		12 months or more		Total	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
(Dollars in thousands)						
December 31, 2023						
U.S. government agencies	\$ —	\$ —	\$ 1,874	\$ (133)	\$ 1,874	\$ (133)
Municipal bonds	6,513	(1,065)	26,537	(6,659)	33,050	(7,724)
Mortgage-backed securities	57	(2)	25,293	(4,055)	25,350	(4,057)
	<u>\$ 6,570</u>	<u>\$ (1,067)</u>	<u>\$ 53,704</u>	<u>\$ (10,847)</u>	<u>\$ 60,274</u>	<u>\$ (11,914)</u>
December 31, 2022						
U.S. government agencies	\$ 1,833	\$ (175)	\$ —	\$ —	\$ 1,833	\$ (175)
Municipal bonds	12,227	(1,114)	23,259	(7,222)	35,486	(8,336)
Mortgage-backed securities	6,981	(410)	21,561	(4,272)	28,542	(4,682)
	<u>\$ 21,041</u>	<u>\$ (1,699)</u>	<u>\$ 44,820</u>	<u>\$ (11,494)</u>	<u>\$ 65,861</u>	<u>\$ (13,193)</u>

As of December 31, 2023, the Company’s investment portfolio included 23 securities in the “unrealized losses less than twelve months” category and 150 securities in the “unrealized losses twelve months or more” category.

As of December 31, 2023, the Company determined that for its available-for-sale debt securities in an unrealized loss position, it did not intend to sell nor was it more likely than not that it would be required to sell the security and that the decline in fair value was not due to credit factors, but due to changes in interest rates and other factors. Accordingly, the Company did not record an allowance for credit losses for its available-for-sale securities as of December 31, 2023.

As of December 31, 2022, the Company had the intent and ability to hold those securities in an unrealized loss position until maturity and management believed the temporary impairments were due to declines in fair value resulting from changes in interest rates and/or increased credit liquidity spreads since the securities were purchased. Therefore, under accounting principles effective at December 31, 2022, the Company did not consider these securities to have other-than-temporary impairment.

The unrealized losses on debt securities shown in the previous tables were recorded as a component of other comprehensive income (loss), net of tax benefit on the Company's consolidated statements of stockholders' equity.

During the years ended December 31, 2023 the Company sold 40 municipal bonds and 2 mortgage-backed securities resulting in gross realized losses of \$59,000, with an amortized cost of \$9.8 million. During the year ended December 31, 2022, the Company did not sell any debt securities.

Scheduled contractual maturities of debt securities are as follows:

	Amortized Cost	Fair Value
	(Dollars in thousands)	
December 31, 2023:		
Less than one year	\$ —	\$ —
After one year through five years	2,118	1,979
After five years through ten years	9,170	8,089
After ten years	31,493	24,856
Mortgage-backed securities	29,520	25,467
Asset-backed securities	2	33
	<u>\$ 72,303</u>	<u>\$ 60,424</u>

The Company's mortgage-backed securities and asset-backed securities have stated maturities that may differ from actual maturities due to the borrowers' ability to prepay obligations. Cash flows from such investments are dependent upon the performance of the underlying assets and are generally influenced by interest rates. In the table above, mortgage-backed securities and asset-backed securities are shown in the aggregate.

Equity Securities

At December 31, 2023 and 2022, equity securities consisted of 22,368 shares of Federal Home Loan Mortgage Corporation ("FHLMC") common stock. During the years ended December 31, 2023 and 2022, the Company recognized an unrealized gain of \$11,000 and an unrealized loss of \$11,000, respectively, on the equity securities, which was recorded in non-interest income in the consolidated statements of income. There were no sales of equity securities during the years ended December 31, 2023 and 2022.

Note 4 - Loans Receivable

Loans receivable, net consists of the following:

	December 31, 2023	December 31, 2022
	(Dollars in thousands)	
Real Estate Loans:		
Residential, one- to four-family ⁽¹⁾	\$ 172,005	\$ 175,904
Home Equity	51,869	53,057
Commercial ⁽²⁾	316,986	326,955
Total real estate loans	540,860	555,916
Other Loans:		
Commercial	16,546	19,576
Consumer	1,130	1,217
Total gross loans	558,536	576,709
Net deferred loan costs	3,755	3,893
Allowance for credit losses on loans	(6,463)	(7,065)
Loans receivable, net	<u>\$ 555,828</u>	<u>\$ 573,537</u>

(1) Includes one- to four-family construction loans.

(2) Includes commercial construction loans

Residential real estate loans serviced for others by the Company totaled \$39.0 million and \$42.1 million at December 31, 2023 and 2022, respectively.

At December 31, 2023, \$55.8 million of one- to four-family residential real estate loans were pledged as collateral for advances from the FHLB.

At December 31, 2023 and 2022, loans to related parties including officers and directors were immaterial as a percentage of our loan portfolio.

The ability of the Company's residential and consumer borrowers to honor their repayment commitments is generally dependent on the level of overall economic activity within the geographical area they reside. Commercial borrowers' ability to repay is generally dependent upon the general health of the economy. Substantially all of the Company's loans are in western New York State and, accordingly, the ultimate collectability of a substantial portion of the loans is susceptible to changes in market conditions in this primary market area.

Note 5 - Allowance for Credit Losses

Allowance for Credit Losses for Loans

The Company adopted ASU 2016-13 on January 1, 2023 at which time the Company implemented the current expected credit loss model in estimating the allowance for credit losses valuation account. Adjustments to the allowance for credit losses on loans is recognized in (credit) provision for credit losses on the consolidated statements of income. As part of the CECL calculation, the loan portfolio is segmented into the following loan types by risk level:

Real Estate Loans:

- One- to Four-Family – are loans secured by first lien collateral on residential real estate primarily held in the Western New York region. These loans can be affected by economic conditions and the value of underlying properties. Western New York's housing market has consistently demonstrated stability in home prices despite economic conditions. Furthermore, the Company has conservative underwriting standards and its residential lending policies and procedures verify that its one- to four-family residential mortgage loans generally conform to secondary market guidelines.

- Home Equity - are loans or lines of credit secured by first or second liens on owner-occupied residential real estate primarily held in the Western New York region. These loans can also be affected by economic conditions and the values of underlying properties. 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. The Company does not originate interest only home equity loans.
- Commercial Real Estate – are loans used to finance the purchase of real property, which generally consists of developed real estate that is held as first lien collateral for the loan. These loans are secured by real estate properties that are primarily held in the Western New York region. 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, and/or the collateral value of the commercial real estate securing the loan, and 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. Also, commercial real estate loans typically involve relatively large loan balances concentrated with single borrowers or groups of related borrowers.

Other Loans:

- Commercial – includes business installment loans, lines of credit, and other commercial loans. Most of our commercial loans are for terms generally not in excess of 5 years. Whenever possible, we collateralize these loans with a lien on business assets and equipment and require the personal guarantees from principals of the borrower. Commercial loans generally involve a higher degree of credit risk, as commercial loans can involve relatively large loan balances to a single borrower or groups of related borrowers, with the repayment of such loans typically dependent on the successful operation of the commercial business and the income stream of the borrower. Such risks can be significantly affected by economic conditions. Although commercial loans may be collateralized by equipment or other business assets, the liquidation of collateral in the event of a borrower default may be an insufficient source of repayment because the equipment or other business assets may be obsolete or of limited use, among other things. Accordingly, the repayment of a commercial loan depends primarily on the credit worthiness of the borrowers (and any guarantors), while liquidation of collateral is a secondary and often insufficient source of repayment.
- Consumer – consist of loans secured by collateral such as an automobile or a deposit account, unsecured loans and lines of credit. Consumer loans 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.

Included in the Real Estate Loans for one-to four-family and commercial real estate are loans to finance the construction of either a one- to four-family owner occupied home or commercial real estate. At the end of the construction period, the loan automatically converts to either a one- to four-family residential mortgage or a commercial real estate mortgage, as applicable. Risk of loss on a construction loan depends largely upon the accuracy of the initial estimate of the value of the property at completion compared to the actual cost of construction. The Company limits its risk during construction as disbursements are not made until the required work for each advance has been completed and an updated lien search is performed. The completion of the construction progress is verified by a Company loan officer or inspections performed by an independent appraisal firm or other third party. Construction loans also expose us to the risk of construction delays which may impair the borrower's ability to repay the loan.

The following table details the changes in the allowance for credit losses by loan segment for the year ended December 31, 2023.

	Real Estate Loans			Other Loans			
	One- to Four-Family ⁽¹⁾	Home Equity	Commercial Real Estate ⁽²⁾	Commercial	Consumer	Unallocated	Total
(Dollars in thousands)							
December 31, 2023							
Allowance for Credit Loss: on Loans							
Balance - January 1, 2023	\$ 411	\$ 217	\$ 5,746	\$ 509	\$ 47	\$ 135	\$ 7,065
Impact of adopting ASC 326	201	114	55	72	(25)	(135)	282
Charge-offs	(3)	—	—	—	(58)	—	(61)
Recoveries	2	—	35	29	8	—	74
(Credit) provision	(79)	(118)	(605)	(139)	44	—	(897)
Balance - December 31, 2023	<u>\$ 532</u>	<u>\$ 213</u>	<u>\$ 5,231</u>	<u>\$ 471</u>	<u>\$ 16</u>	<u>\$ —</u>	<u>\$ 6,463</u>
Ending balance: individually evaluated for impairment	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Ending balance: collectively evaluated for impairment	<u>\$ 532</u>	<u>\$ 213</u>	<u>\$ 5,231</u>	<u>\$ 471</u>	<u>\$ 16</u>	<u>\$ —</u>	<u>\$ 6,463</u>
Gross Loans Receivable⁽³⁾:							
Ending balance	<u>\$ 172,005</u>	<u>\$ 51,869</u>	<u>\$ 316,986</u>	<u>\$ 16,546</u>	<u>\$ 1,130</u>	<u>\$ —</u>	<u>\$ 558,536</u>
Ending balance: individually evaluated for impairment	<u>\$ 140</u>	<u>\$ —</u>	<u>\$ 1,242</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 1,382</u>
Ending balance: collectively evaluated for impairment	<u>\$ 171,865</u>	<u>\$ 51,869</u>	<u>\$ 315,744</u>	<u>\$ 16,546</u>	<u>\$ 1,130</u>	<u>\$ —</u>	<u>\$ 557,154</u>

(1) Includes one- to four-family construction loans.

(2) Includes commercial construction loans of \$16.4 million.

(3) Gross Loans Receivable does not include allowance for credit losses of \$(6,463) or deferred loan costs of \$3,755.

Prior to the adoption of ASC 326 on January 1, 2023, the Company calculated the allowance for loan losses using the incurred loss methodology. The following table summarizes the activity in the allowance for loan losses and the distribution of the allowance for loan losses and loans receivable by loan portfolio class and impairment method as of December 31, 2022:

	Real Estate Loans			Other Loans			
	One- to Four-Family	Home Equity	Commercial Real Estate ⁽²⁾	Commercial	Consumer	Unallocated	Total
	(Dollars in thousands)						
December 31, 2022							
Allowance for Loan Losses							
Balance - January 1, 2022	\$ 383	\$ 211	\$ 4,737	\$ 531	\$ 32	\$ 224	\$ 6,118
Charge-offs	—	—	(4)	—	(69)	—	(73)
Recoveries	17	1	269	—	8	—	295
Provision (credit)	11	5	744	(22)	76	(89)	725
Balance - December 31, 2022	<u>\$ 411</u>	<u>\$ 217</u>	<u>\$ 5,746</u>	<u>\$ 509</u>	<u>\$ 47</u>	<u>\$ 135</u>	<u>\$ 7,065</u>
Ending balance: individually evaluated for impairment	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>
Ending balance: collectively evaluated for impairment	<u>\$ 411</u>	<u>\$ 217</u>	<u>\$ 5,746</u>	<u>\$ 509</u>	<u>\$ 47</u>	<u>\$ 135</u>	<u>\$ 7,065</u>
Gross Loans Receivable⁽¹⁾:							
Ending balance	<u>\$ 175,904</u>	<u>\$ 53,057</u>	<u>\$ 326,955</u>	<u>\$ 19,576</u>	<u>\$ 1,217</u>	<u>\$ —</u>	<u>\$ 576,709</u>
Ending balance: individually evaluated for impairment	<u>\$ 153</u>	<u>\$ 14</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 167</u>
Ending balance: collectively evaluated for impairment	<u>\$ 175,751</u>	<u>\$ 53,043</u>	<u>\$ 326,955</u>	<u>\$ 19,576</u>	<u>\$ 1,217</u>	<u>\$ —</u>	<u>\$ 576,542</u>

(1) Gross Loans Receivable does not include allowance for loan losses of \$(7,065) or deferred loan costs of \$3,893.

(2) Includes commercial construction loans of \$22.9 million.

Unfunded Loan Commitments

The Company's allowance for credit losses on unfunded loan commitments is recognized as a liability and included within other liabilities on the consolidated statements of financial condition, with adjustments to the reserve recognized in (credit) provision for credit losses on the consolidated statements of income. The Company did not record an allowance on unfunded loan commitments prior to January 1, 2023. The Company's activity in the allowance for credit losses on unfunded loan commitments for the year ended December 31, 2023 was as follows:

	<u>For the year ended December 31, 2023</u> (Dollars in thousands)
Balance at December 31, 2022	\$ —
Impact of CECL Adoption	633
Provision for Credit Losses	(146)
Balance at December 31, 2023	<u>\$ 487</u>

Non-accrual Loans and Delinquency Status

The following table presents loans on non-accrual status, loans on non-accrual status with no allowance for credit losses recorded, and loans past due 90 days or more and still accruing by loan segment as of the periods indicated.

	<u>Total Non-accrual</u>		<u>Non-accrual with no Allowance for Credit Losses</u>		<u>90 Days or More Past Due and Accruing</u>	
	<u>December 31, 2023</u>	<u>December 31, 2022</u>	<u>December 31, 2023</u>	<u>December 31, 2022</u>	<u>December 31, 2023</u>	<u>December 31, 2022</u>
	(Dollars in thousands)					
Real Estate Loans:						
Residential, one- to four-family ⁽¹⁾	\$ 1,904	\$ 2,295	\$ 1,904	\$ 2,295	\$ —	\$ 1
Home Equity	196	602	196	602	—	—
Commercial Real Estate ⁽²⁾	1,242	—	1,242	—	—	—
Other Loans:						
Commercial	—	—	—	—	—	—
Consumer	5	34	5	34	—	—
Total loans	<u>\$ 3,347</u>	<u>\$ 2,931</u>	<u>\$ 3,347</u>	<u>\$ 2,931</u>	<u>\$ —</u>	<u>\$ 1</u>

⁽¹⁾ Includes one- to four-family construction loans.

⁽²⁾ Includes commercial construction loans.

There was no interest income recognized on non-accrual loans during the years ended December 31, 2023 and 2022. The accrual of interest on loans is discontinued when in management's opinion, the borrower may be unable to meet payments as they become due. A loan does not have to be 90 days delinquent in order to be classified as non-accrual. When interest accrual is discontinued, all unpaid accrued interest is reversed. If ultimate collection of principal is in doubt, all cash receipts on non-accrual loans are applied to reduce the principal balance.

The following tables provide an analysis of past due loans as of the dates indicated:

	<u>30-59 Days Past Due</u>	<u>60-89 Days Past Due</u>	<u>90 Days or More Past Due</u>	<u>Total Past Due</u>	<u>Current Due</u>	<u>Total Loans Receivable</u>
	(Dollars in thousands)					
December 31, 2023:						
Real Estate Loans:						
Residential, one- to four-family ⁽¹⁾	\$ 1,488	\$ 3	\$ 276	\$ 1,767	\$ 170,238	\$ 172,005
Home equity	315	583	56	954	50,915	51,869
Commercial ⁽²⁾	—	—	203	203	316,783	316,986
Other Loans:						
Commercial	—	—	1,039	1,039	15,507	16,546
Consumer	6	—	1	7	1,123	1,130
Total	<u>\$ 1,809</u>	<u>\$ 586</u>	<u>\$ 1,575</u>	<u>\$ 3,970</u>	<u>\$ 554,566</u>	<u>\$ 558,536</u>

	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due	Total Past Due	Current Due	Total Loans Receivable
(Dollars in thousands)						
December 31, 2022:						
Real Estate Loans:						
Residential, one- to four-family ⁽¹⁾	\$ 1,173	\$ 380	\$ 1,649	\$ 3,202	\$ 172,702	\$ 175,904
Home equity	137	287	468	892	52,165	53,057
Commercial ⁽²⁾	—	—	—	—	326,955	326,955
Other Loans:						
Commercial	—	—	—	—	19,576	19,576
Consumer	15	—	17	32	1,185	1,217
Total	\$ 1,325	\$ 667	\$ 2,134	\$ 4,126	\$ 572,583	\$ 576,709

⁽¹⁾ Includes one- to four-family construction loans.

⁽²⁾ Includes commercial real estate construction loans.

Collateral-Dependent Loans

Collateral-dependent loans are loans for which the repayment is expected to be provided substantially through the operation or sale of the collateral and the borrower is experiencing financial difficulty. These loans do not share common risk characteristics and are not included within the collectively evaluated loans for determining the allowance for credit losses. Under CECL, for collateral-dependent loans, the Company has adopted the practical expedient to measure the allowance for credit losses based on the fair value of collateral. The allowance for credit losses is measured on an individual loan basis based on the difference between the fair value of the loan's collateral, which is adjusted for liquidation costs, and the amortized cost. If the fair value of the collateral exceeds the amortized cost, no allowance for credit losses is required. Refer to Note 13 - Fair Value of Financial Instruments for additional information.

The following table presents an analysis of the amortized cost of collateral-dependent loans of the Company as of December 31, 2023 by collateral type and loan segment:

	Residential Properties	Business Assets	Land	Commercial Property	Other	Total Loans
(Dollars in thousands)						
Real Estate Loans:						
Residential, one- to four-family	\$ 143	\$ —	\$ —	\$ —	\$ —	\$ 143
Home Equity	—	—	—	—	—	—
Commercial	200	—	1,026	—	—	1,226
Total	\$ 343	\$ —	\$ 1,026	\$ —	\$ —	\$ 1,369

There was no allowance recorded on the above noted collateral-dependent loans as of December 31, 2023.

Pre-Adoption of ASC 326 – Impaired Loans

For periods prior to the adoption of ASC 326, a loan was considered impaired when, based on current information and events, it was probable that the Company would 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 in determining impairment include payment status, collateral value and the probability of collecting scheduled payments when due. Impairment was measured on a loan-by-loan basis for commercial real estate loans and commercial loans. Larger groups of smaller balance homogeneous loans were collectively evaluated for impairment. Accordingly, the Company did not separately identify

individual consumer, home equity, or one- to four-family loans for impairment disclosure, unless they were subject to a troubled debt restructuring.

The following is a summary of information pertaining to impaired loans at or for the periods indicated:

	Recorded Investment	Unpaid Principal Balance	Related Allowance
At December 31, 2022			
(Dollars in thousands)			
With no related allowance recorded:			
Residential, one- to four-family	\$ 153	\$ 153	\$ —
Home equity	14	14	—
Total impaired loans with no related allowance	167	167	—
	Average Recorded Investment	Interest Income Recognized	
For the Year Ended December 31, 2022			
With no related allowance recorded:			
Residential, one- to four-family	\$ 231	\$ 12	
Home equity	21	—	
Commercial real estate ⁽¹⁾	2,440	—	
Total impaired loans	\$ 2,692	\$ 12	

⁽¹⁾ Average Commercial Real Estate loans consisted of one loan which was paid off during the year ended December 31, 2022.

Credit Quality Indicators

The Company's policies provide for the classification of loans as follows:

- Pass/Performing;
- Special Mention – does not currently expose the Company to a sufficient degree of risk but does possess credit deficiencies or potential weaknesses deserving the Company's close attention;
- Substandard – has one or more well-defined weaknesses and are characterized by the distinct possibility that the Company will sustain some loss if the deficiencies are not corrected. A substandard asset would be one inadequately protected by the current net worth and paying capacity of the obligor or pledged collateral, if applicable;
- Doubtful – has 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; and
- Loss – loan is considered uncollectible and continuance without the establishment of a specific valuation reserve is not warranted.

Each commercial loan is individually assigned a loan classification. The Company's consumer loans, including residential one- to four-family loans and home equity loans, are classified by using the delinquency status as the basis for classifying these loans. Generally, all consumer loans more than 90 days past due are classified and placed in non-accrual. Such loans that are well-secured and in the process of collection will remain in accrual status.

Asset quality indicators for all loans and the Company's risk rating process are reviewed on a monthly basis. Risk ratings are updated as circumstances that could affect the repayment of individual loans are brought to management's attention through an established monitoring process. Written action plans are maintained and reviewed on a quarterly basis for all classified commercial loans. In addition to the Company's internal process, an outsourced independent credit review function is in place for commercial loans to further assess assigned risk classifications and monitor compliance with internal lending policies and procedures.

The following table presents loans by credit quality indicator by origination year at December 31, 2023:

	2023	2022	2021	2020	2019	Prior	Revolving Loans	Total
(Dollars in thousands)								
Residential, one-to four-family⁽¹⁾:								
Pass	\$ 12,203	\$ 36,103	\$ 29,486	\$ 17,975	\$ 10,075	\$ 63,928	\$ —	\$ 169,770
Substandard	—	262	39	92	270	1,572	—	2,235

Doubtful	—	—	—	—	—	—	—	—
Total	\$ 12,203	\$ 36,365	\$ 29,525	\$ 18,067	\$ 10,345	\$ 65,500	\$ —	\$ 172,005
Current period gross chargeoffs	\$ —	\$ —	\$ 3	\$ —	\$ —	\$ —	\$ —	\$ 3
Home Equity:								
Pass	\$ 3,660	\$ 3,120	\$ 102	\$ 47	\$ 274	\$ 511	\$ 43,862	\$ 51,576
Substandard	—	—	—	—	—	—	293	293
Doubtful	—	—	—	—	—	—	—	—
Total	\$ 3,660	\$ 3,120	\$ 102	\$ 47	\$ 274	\$ 511	\$ 44,155	\$ 51,869
Current period gross chargeoffs	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Commercial Real Estate⁽²⁾:								
Pass	\$ 15,396	\$ 85,587	\$ 50,797	\$ 42,226	\$ 38,694	\$ 72,256	\$ —	\$ 304,956
Special mention	—	—	—	984	682	—	—	1,666
Substandard	—	—	—	1,242	5,386	3,736	—	10,364
Doubtful	—	—	—	—	—	—	—	—
Total	\$ 15,396	\$ 85,587	\$ 50,797	\$ 44,452	\$ 44,762	\$ 75,992	\$ —	\$ 316,986
Current period gross chargeoffs	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Commercial Loans:								
Pass	\$ 1,243	\$ 2,591	\$ 732	\$ 622	\$ 1,901	\$ 4,997	\$ —	\$ 12,086
Special mention	—	—	263	—	764	—	—	1,027
Substandard	—	—	—	—	3,114	319	—	3,433
Doubtful	—	—	—	—	—	—	—	—
Total	\$ 1,243	\$ 2,591	\$ 995	\$ 622	\$ 5,779	\$ 5,316	\$ —	\$ 16,546
Current period gross chargeoffs	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Consumer Loans:								
Pass	\$ 269	\$ 245	\$ 79	\$ 136	\$ 2	\$ 210	\$ 184	\$ 1,125
Substandard	—	—	2	1	—	—	2	5
Doubtful	—	—	—	—	—	—	—	—
Total	\$ 269	\$ 245	\$ 81	\$ 137	\$ 2	\$ 210	\$ 186	\$ 1,130
Current period gross chargeoffs	\$ —	\$ 8	\$ 3	\$ 3	\$ 4	\$ —	\$ 40	\$ 58

(1) Includes one- to four-family construction loans.

(2) Includes commercial construction loans.

The following table presents loans by credit quality indicator at December 31, 2022:

	Pass/Performing	Special Mention	Substandard	Doubtful	Loss	Total
(Dollars in thousands)						
December 31, 2022						
Real Estate Loans:						
Residential, one- to four-family ⁽¹⁾	\$ 173,857	\$ —	\$ 2,047	\$ —	\$ —	\$ 175,904
Home equity	52,269	—	788	—	—	53,057
Commercial ⁽²⁾	314,218	3,272	9,465	—	—	326,955
Other Loans:						
Commercial	14,926	1,112	3,538	—	—	19,576
Consumer	1,183	—	24	—	10	1,217
Total	\$ 556,453	\$ 4,384	\$ 15,862	\$ —	\$ 10	\$ 576,709

(1) Includes one- to four- family construction loans.

(2) Includes commercial construction loans.

Modifications with Borrowers Experiencing Financial Difficulty:

Occasionally, the Company modifies loans to borrowers in financial distress by providing modifications to loans that it would not normally grant. Such modifications could include principal forgiveness, term extension, a significant payment delay, an interest rate reduction or the addition of a co-borrower or guarantor. When principal forgiveness is provided, the amount of the forgiveness is charged-off against the allowance for credit losses.

Because the effect of most modifications made to borrowers experiencing financial difficulty is already included in the allowance for credit losses, a change to the allowance for credit losses is generally not recorded upon modification.

In some cases, the Company provides multiple types of modifications on one loan. Typically, one type of concession, such as a term extension, is granted initially. If the borrower continues to experience financial difficulty, another modification may be granted, such as principal forgiveness.

The following table presents the amortized cost basis of loans at December 31, 2023 that were experiencing financial difficulty and were modified during the year ended December 31, 2023, by loan class and by type of modification. The percentage of the amortized cost basis of loans that were modified to borrowers in financial distress as compared to the amortized cost basis of each class of financing receivables is also presented.

	Principal Forgiveness	Payment Delay	Term Extension	Interest Rate Reduction	Add Co- Borrower/ Guarantor	Combination Term Extension and Add Co- Borrower	Percentage of Total Class of Financing Receivable
(Dollars in thousands)							
Real Estate Loans							
Commercial real estate	\$ —	\$ —	\$ —	\$ —	\$ 4,859	\$ —	1.53 %
Other loans							
Commercial	—	—	—	—	—	1,046	6.24 %
Total	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 4,859</u>	<u>\$ 1,046</u>	

The following table describes the financial effect of the modifications made to borrowers experiencing financial difficulty:

Loan Type	Term Extension and Added Co-Borrower
	Financial Effect
Commercial Real Estate	Added a co-borrower with financial ability to strengthen the credit risk related to this particular loans. No other modification was made to this loan that had a financial effect on the borrower(s).
Other - Commercial	Added a weighted-average of 5 years to the life of the loans, which reduced the monthly payment amount for the borrowers. Added a co-borrower with financial ability to strengthen the credit risk related to these particular loans.

There were no modified loans past due or on non-accrual as of December 31, 2023.

There were no modified loans made during the year ended December 31, 2023 that subsequently defaulted.

The Company has not committed to lending additional amounts to the borrowers included in the previous tables.

Foreclosed real estate consists of property acquired in settlement of loans which is carried at its fair value less estimated selling costs. Write-downs from cost to fair value less estimated selling costs are recorded at the date of acquisition or repossession and are charged to the allowance for credit losses. Foreclosed real estate was \$34,000 and \$95,000 at December 31, 2023 and December 31, 2022, respectively, and was included as a component of other assets on the consolidated statements of financial condition. The recorded investment of consumer mortgage loans secured by residential real estate properties for which formal foreclosure proceedings are in process according to local requirements of the applicable jurisdiction was \$158,000 at December 31, 2023 and \$1.8 million at December 31, 2022.

Note 6- Premises and Equipment

Premises and equipment consist of the following:

	December 31,	
	2023	2022
	(Dollars in thousands)	
Land	\$ 1,210	\$ 1,209
Buildings and improvements	13,186	13,130
Furniture and equipment	7,596	7,306
Premises and equipment, gross	21,992	21,645
Accumulated depreciation	(14,122)	(13,359)
Premises and equipment, net	<u>\$ 7,870</u>	<u>\$ 8,286</u>

Depreciation and amortization of premises and equipment amounted to \$807,000, and \$856,000 for the years ended December 31, 2023 and 2022, respectively, and is included in occupancy and equipment expense in the accompanying consolidated statements of income.

Note 7 - Deposits

Deposits consist of the following at the dates indicated:

	December 31,	
	2023	2022
	Amount	Amount
	Weighted Average Rate	Weighted Average Rate
	(Dollars in thousands)	
Demand deposits:		
Non-interest bearing	\$ 95,186 — %	\$ 105,678 — %
Interest bearing	72,966 0.10	85,033 0.10
Money market accounts	137,374 2.75	149,250 0.58
Savings accounts	64,584 0.07	77,200 0.05
Time deposits	<u>220,814 3.93</u>	<u>152,958 1.59</u>
	<u>\$ 590,924 2.13 %</u>	<u>\$ 570,119 0.60 %</u>

Scheduled maturities of time deposits at December 31, 2023 were as follows (dollars in thousands):

2024	\$ 150,502
2025	58,883
2026	3,874
2027	4,810
2028	2,745
Thereafter	—
	<u>\$ 220,814</u>

Time deposit accounts with balances in excess of \$250,000 amounted to \$38.4 million and \$28.3 million at December 31, 2023 and 2022, respectively.

Interest expense on deposits was as follows:

	Years Ended December 31,	
	2023	2022
	(Dollars in thousands)	
Interest bearing checking accounts	\$ 75	\$ 78
Money market accounts	1,914	486
Savings accounts	47	41
Time deposits	6,033	1,210
	<u>\$ 8,069</u>	<u>\$ 1,815</u>

At December 31, 2023 and 2022, deposits of directors, executive officers and their affiliates totaled \$2.0 million and \$11.3 million, respectively.

Note 8 - Borrowings

At December 31, 2023, the Company had written agreements with the Federal Home Loan Bank of New York (“FHLBNY”), which allows it to borrow up to the maximum lending values designated by the type of collateral pledged. As of December 31, 2023 and 2022, our maximum lending value was \$36.8 million and \$116.1 million, respectively, and was collateralized by a pledge of certain, fixed-rate residential, one- to four-family loans. At December 31, 2023 we had advances outstanding under this agreement of \$35.3 million, which consisted of long-term debt at fixed rates. At December 31, 2022 we had advances outstanding under this agreement of \$37.5 million, which consisted of short-term borrowings and long-term debt at fixed rates.

At December 31, 2023, the Company had no short-term borrowings from the FHLBNY. At December 31, 2022 the Company had short-term borrowings of \$12.6 million, and had fixed rates of interest ranging from 4.57% to 4.61% and matured within one to three weeks. The weighted average interest rate was 4.59% as of December 31, 2022.

At December 31, 2023 and 2022, the Company had long-term debt outstanding under the written agreement with the FHLBNY of \$35.3 million and \$25.0 million, respectively. All of the advances outstanding at December 31, 2023 and 2022 were term borrowings with initial terms of one to five years at fixed rates of interest ranging from 1.70% to 5.20%. As of December 31, 2023 and 2022, the weighted average interest rate was 3.41% and 2.24%, respectively.

We have a written agreement with the FRB discount window for overnight borrowings which is collateralized by a pledge of our securities, and allows us to borrow up to the value of the securities pledged. At December 31, 2023 there were no securities pledged to the FRB. At December 31, 2022 securities pledged to the FRB discount window was equal to a book value of \$14.4 million and fair value of \$12.2 million. There were no balances outstanding with the FRB as of December 31, 2023 and 2022.

The Company has also established lines of credit with other correspondent banks, totaling \$27.0 million, of which \$25.0 million is unsecured and the remaining \$2.0 million is secured by a pledge of the Company’s securities when a draw is made. The lines of credit provide for overnight borrowings through the purchase of Federal Funds, at an interest rate equal to the Federal Funds rate plus a spread. At December 31, 2023 and 2022, there were no balances outstanding on these lines of credit.

Long-term debt from the FHLBNY and related contractual maturities consisted of the following:

Maturity	At December 31, 2023			At December 31, 2022		
	Amount	Weighted Average Interest Rate	(Dollars in thousands)	Amount	Weighted Average Interest Rate	
In one year	\$ 25,000	3.28 %		\$ 4,950	2.31 %	
In two years	8,250	3.79 %		15,000	2.01 %	
In three years	1,000	3.49 %		3,000	2.44 %	
In four years	1,000	3.49 %		1,000	3.49 %	
In five years	—	— %		1,000	3.49 %	
	<u>\$ 35,250</u>	<u>3.41 %</u>		<u>\$ 24,950</u>	<u>2.24 %</u>	

Note 9 - Lease Obligations

The Company leases certain branch offices under operating or finance leases. Certain lease arrangements contain extension options which are typically for 5 years at the then fair market rental rates. As these extension options are not generally considered reasonably certain of exercise, they are not included in the lease term.

As of December 31, 2023 and 2022, two of the Company's branch offices were under an operating lease and the Company's operating lease ROU assets were \$231,000 and \$373,000, respectively, and its lease liabilities were \$242,000 and \$390,000, respectively. The ROU assets are recorded under other assets and the lease liabilities are recorded under other liabilities on the consolidated statements of financial condition.

Operating lease costs that were recorded in occupancy and equipment expense on the consolidated statements of income for each of the years ended December 31, 2023 and 2022 were \$150,000.

The table below summarizes information related to our lease liabilities at or for the years ended December 31, 2023 and 2022:

(in thousands, except for percent and period data)	For the Years Ended December 31,	
	2023	2022
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	\$ 157	\$ 157
Operating cash flows from finance leases	51	57
Financing cash flows from finance leases	81	69
Weighted-average remaining lease term, operating leases, in years	1.6	2.6
Weighted-average discount rate – operating leases	2.61 %	2.61 %

The Company has one long-term finance lease agreement for a branch location and the outstanding balance of the finance lease (included in other liabilities) at December 31, 2023 and 2022 was \$475,000 and \$554,000, respectively, with a weighted-average discount rate of 9.22%. The remaining term of this lease is 4.5 years. The asset related to this finance lease is included in premises and equipment and consists of the cost of \$1.1 million less accumulated depreciation of \$756,000 and \$714,000 at December 31, 2023 and 2022, respectively.

The table below summarizes the maturity of remaining lease liabilities as of December 31, 2023:

	Operating Leases	Finance Lease
	(Dollars in thousands)	
2024	\$ 157	\$ 136
2025	90	136
2026	—	136
2027	—	136
2028	—	56
2028 and thereafter	—	—
Total Lease Payments	\$ 247	\$ 600
Less: Amounts representing interest	(5)	(125)
Present value of lease liabilities	\$ 242	\$ 475

Note 10 - Income Taxes

The Company's deferred federal and state income tax and related valuation accounts represent the estimated impact of temporary differences between how we recognize our assets and liabilities under GAAP and how such assets and liabilities are recognized under federal and state tax law. Deferred tax assets and liabilities are determined based on the difference between the financial statement and tax bases of assets and liabilities as measured by the enacted tax rates which will be in effect when these differences are expected to be recovered or settled.

The provision for income tax expense consists of the following:

	Years Ended December 31,	
	2023	2022
	(Dollars in thousands)	
Current:		
Federal	\$ 1,377	\$ 1,343
State	5	6
Total Current	1,382	1,349
Deferred:		
Federal	17	(187)
State	—	—
Total Deferred	17	(187)
Total Income Tax Expense	\$ 1,399	\$ 1,162

A reconciliation of the statutory federal income tax at a rate of 21% for the years ended December 31, 2023 and 2022 to the income tax expense included in the consolidated statements of income is as follows:

	Years Ended December 31,	
	2023	2022
Federal income tax at statutory rate	21.0 %	21.0 %
State benefit, net of federal expense	(1.3)	(0.6)
Tax-exempt interest income	(3.3)	(3.6)
Deferred tax valuation allowance	1.3	0.6
Life insurance income	3.5	(1.0)
Other	1.3	0.5
Total Income Tax Expense	22.5 %	16.9 %

The tax effects of temporary differences that give rise to significant portions of deferred tax assets and liabilities are as follows:

	December 31,	
	2023	2022
	(Dollars in thousands)	
Deferred tax assets:		
Unrealized losses on securities available for sale	\$ 3,075	\$ 3,372
Allowance for credit loss	1,798	1,822
Deferred compensation	1,460	1,370
Net operating loss ("NOL")	153	62
Impairment of equity investments	129	129
Accrued expenses	84	121
Right of use liability	48	80
Stock options granted	16	21
Other	13	18
Total Deferred Tax Assets	6,776	6,995
Deferred tax liabilities:		
Deferred loan origination costs	(972)	(1,004)
Depreciation	(576)	(598)
Prepaid expenses	(36)	(97)
Right of use asset	(49)	(78)
Other	(49)	(123)
Total Deferred Tax Liabilities	(1,682)	(1,900)
Deferred tax valuation allowance	(1,203)	(1,126)
Net Deferred Tax Asset	\$ 3,891	\$ 3,969

The net deferred tax asset was recorded in other assets on the consolidated statements of financial condition at December 31, 2023 and 2022. In assessing the ability of the Company to realize the benefit of the deferred tax assets, management considers whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, availability of operating loss carry-backs, projected future taxable income and tax planning strategies in making this assessment. Based upon the level of historical taxable income and projections for future taxable income over the periods which deferred tax assets are deductible, management believes it is more likely than not the Company will generate sufficient taxable income to realize the benefits of these deductible differences at December 31, 2023, except for the following:

- Valuation allowance of \$129,000 on the deferred tax asset for the 2011 other than temporary impairment charge; and
- Valuation allowance of \$1,074,000 on state deferred tax assets with anticipated net operating loss expiration dates of 2035 through 2043, as well as unrealized losses on securities available for sale.

Management believes that the Company will not generate sufficient income of the appropriate character (i.e. capital gains) to utilize any of the deferred tax asset created by the 2011 other than temporary impairment charge. Management believes that it is more likely than not that the Company will not realize its state deferred tax assets because of reform in New York State corporate tax law. Beginning in 2015, the most significant change in the tax law allows the Company to deduct up to 50% of its net interest income received from qualifying loans. This change effectively eliminates the Company's New York State tax on income resulting in the Company being taxed on its apportioned capital. Because of this tax reform, the Company will not generate sufficient taxable income within New York State to realize its existing state deferred tax assets. There was a \$77,000 increase in the deferred tax valuation recorded during 2023 and a \$674,000 increase in the deferred tax valuation recorded during 2022.

Under prior federal law, tax bad debt reserves created prior to January 1, 1998 were subject to recapture into taxable income should the Company fail to meet certain qualifying asset and definition tests. The 1996 federal legislation eliminated these thrift related recapture rules. However, under current law, pre-1988 reserves remain subject to recapture should the Company make certain non-dividend distributions or cease to maintain a thrift or bank charter. Management has no intention of taking any such actions. At December 31, 2023 and 2022, the Company's total pre-1988 tax bad debt reserve was \$2.2 million. This reserve reflects the cumulative effect of federal tax deductions by the Company for which no federal income tax provision has been made.

Current income tax guidance prescribes a recognition threshold and measurement attribute for the financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return, and also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. The Company recognized no adjustment for unrecognized income tax benefits for the years ended December 31, 2023 and 2022. As of December 31, 2023, there has been no material change in any uncertain tax position. The Company's policy is to recognize interest and penalties on unrecognized tax benefits in income tax expense in the consolidated statements of income.

The Company's Federal and New York State tax returns, constituting the returns of the major taxing jurisdictions, are subject to examination by the taxing authorities for all open years as prescribed by applicable statute. No waivers have been executed that would extend the period subject to examination beyond the period prescribed by statute. The federal tax returns for the years ended December 31, 2020, 2021, 2022, and 2023 remain subject to examination by the IRS. The state tax returns for the years ended December 31, 2020, 2021, 2022, and 2023 for New York State remains subject to examination.

Note 11 - Employee and Director Benefit Plans

401K Plan

The Company maintains a 401(k) savings plan covering employees who have completed three months of service and attained age 21. Participants may make contributions to the 401(k) Plan in the form of salary deferrals of up to 75% of their total compensation subject to certain IRS limitations. The plan consists of three components: 401(k), Profit Sharing and Safe Harbor. For the 401(k) component, the Company makes a matching contribution equal to 40% of the participant salary deferral, up to 6% of such employee's compensation after one year of service. For the profit sharing component, the Company makes a discretionary contribution, up to 5.1% of an eligible employee's salary, depending on years of service. Lastly, the Company contributes 3.4% of an eligible employee's salary based on years of service, which is a discretionary contribution to the Safe Harbor component of the plan. The Company's expense for all three components of the 401(k) plan for the years ended December 31, 2023 and 2022 was \$452,000 and \$527,000, respectively.

1999 Supplemental Benefit Plans

Effective October 1, 1999, the Company initiated a non-qualified Executive Supplemental Benefit Plan and a non-qualified Directors Supplemental Benefit Plan (the "1999 Plans"). Both plans are unfunded and provide a predefined annual benefit to be paid to executives and directors for fifteen years upon their retirement. The Company can set aside assets to fund the liability which will be subject to claims of the Company's creditors upon liquidation of the Company. Annual benefits increase at a predetermined amount until the executive or director reaches a predetermined retirement age. Predefined benefits are 100% vested at all times and in the event of death, are guaranteed to continue at the full amount to their designated beneficiaries. The Company had a liability under the 1999 Plans of \$324,000 and \$453,000 at December 31, 2023 and 2022, respectively. This liability was included in other liabilities on the consolidated statements of financial condition and was calculated using an assumed discount rate of 6.17% in 2023 and 2022.

The Company's expense for the 1999 Plans was \$23,000 and \$35,000 for the years ended December 31, 2023 and 2022, respectively.

2001 and 2012 Supplemental Benefit Plans

Effective October 1, 2001, the Company initiated a non-qualified Executive Supplemental Benefit Plan and a non-qualified Director's Supplemental Benefit Plan (collectively, the "2001 Plans"). The Company amended and restated the 2001 Plans effective November 1, 2015.

Effective January 27, 2016, the Company amended the 2001 Supplemental Benefit Plan for Directors, resulting in a change to the benefit formula from a fixed, pre-determined dollar benefit. The formula provides a benefit equal to a percentage of the director's average pay. The average pay is multiplied by number of years of service, not to exceed 20 years of service or 40% of average final pay. The benefit is payable over a period of fifteen years beginning the month following age 72, unless termination occurs due to disability, death or a change in control.

Effective May 18, 2016, the Company amended the 2001 Supplemental Benefit Plan for Executives resulting in a change in the benefit formula from a fixed, pre-determined dollar benefit to a formula-based benefit. The formula provides a benefit equal to a percentage of the executive's average pay. The average pay is multiplied by number of years of service, not to exceed 20 years of service or 40% of average final pay. A reduced benefit is payable if a termination of service occurs prior to age 65. The benefit is payable over a period of fifteen years beginning the month following age 65, unless termination occurs due to disability, death or a change in control.

The 2001 Plans are unfunded. The Company had a liability under these plans of \$2.8 million and \$2.6 million at December 31, 2023 and 2022, respectively. This liability was included in other liabilities on the consolidated statements of financial condition and was calculated using an assumed discount rate of 6.17% in 2023 and 2022.

Effective June 30, 2012, the Company implemented a Supplemental Executive Benefit Plan (the "2012 Plan") with one executive. The 2012 Plan provides that when the executive attains age 67, the executive will be entitled to a fixed, pre-determined annual benefit under the 2012 Plan, which will be paid in monthly installments for 15 years. The 2012 Plan was amended on May 18, 2016 to update the fixed, pre-determined annual benefit amount. The 2012 Plan provides for a reduced benefit in the event the executive terminates his employment for a reason other than death, disability, cause or a change in control, before the executive attains the age 67, which will be paid in monthly installments for 15 years. In the event of death, the vested benefit is payable to the beneficiary as a lump sum payment. The Company had a liability under this plan of \$1.6 million and \$1.3 million as of December 31, 2023 and 2022, respectively. This liability was included in other liabilities on the consolidated statements of financial condition and was calculated using an assumed discount rate of 5.12% in 2023 and 2022.

Under the 2001 Plans and the 2012 Plan, the Company can set aside assets to fund the liability which will be subject to claims of the Company's creditors upon liquidation of the Company.

The Company's expense for the 2001 and 2012 Plans was \$819,000 and \$567,000 for the years ended December 31, 2023 and 2022, respectively.

2018 Retention Agreement

Effective March 29, 2018, the Company entered into a retention agreement with one executive. The agreement provides that the executive will receive a payment of \$1.4 million (the "Normal Retention Payment") provided that the executive remains continuously employed with the Bank through March 29, 2028 (the "Retention Date"). The Normal Retention Payment will be paid in three equal installments on March 29, 2028, January 2, 2029, and January 2, 2030. If the executive's employment is terminated without cause or for good reason (as defined in the agreement) prior to the Retention Date, the executive will receive the vested account balance as set forth in the agreement. In the event that the executive's employment terminates prior to the Retention Date due to death or disability, the executive or his beneficiary, as applicable, will generally receive the vested account balance. If the executive's employment is terminated prior to the Retention Date, and within two years of a change in control (as defined in the agreement), the executive will receive the Normal Retention Payment in a lump sum payment. The Company has a liability under this plan of \$627,000 and \$492,000 as of December 31, 2023 and 2022, respectively. This liability was included in other liabilities on the consolidated statements of financial condition and was calculated using an assumed discount rate of 5.12% in 2023 and 2022.

The Company's expense for the 2018 Plan was \$135,000 and \$122,000 for the years ended December 31, 2023 and 2022, respectively.

The Company has purchased bank owned life insurance for the purpose of funding the liabilities related to the 1999 Supplemental Benefit Plans, the 2001 and 2012 Supplemental Benefit Plans, and the 2018 Retention Agreement. The cash surrender value of such bank owned life insurance amounted to \$29.4 million at December 31, 2023 and \$23.2 million at December 31, 2022.

Note 12 – Stock-based Compensation

As of December 31, 2023, the Company had three active stock-based compensation plans, which are described below. The compensation cost that has been recorded under salary and benefits expense in the non-interest expense section of the consolidated statements of income for these plans was \$103,000 and \$335,000 for the years ended December 31, 2023 and 2022.

2006 Stock Option Plan

The Company's 2006 Stock Option Plan (the "Stock Option Plan"), which was approved by the Company's stockholders, permitted the grant of options to its employees and non-employee directors for up to 297,562 shares of common stock. The Stock Option Plan expired on October 24, 2016, and grants of options can no longer be awarded.

Both incentive stock options and non-qualified stock options have been granted under the Stock Option Plan. The exercise price of each stock option equals the market price of the Company's common stock on the date of grant and an option's maximum term is ten years. The stock options generally vest over a five year period.

A summary of the status of the Stock Option Plan during the year ended December 31, 2023 and 2022 is presented below:

	2023			2022		
	Options	Weighted Average Exercise Price	Remaining Contractual Life	Options	Weighted Average Exercise Price	Remaining Contractual Life
Outstanding at beginning of year	58,857	\$ 14.38		64,548	\$ 14.38	
Granted	—	—		—	—	
Exercised	—	—		—	—	
Forfeited	—	—		(5,691)	\$ 14.38	
Outstanding at end of period	58,857	\$ 14.38	2.8 years	58,857	\$ 14.38	3.8 years
Options exercisable at end of period	58,857	\$ 14.38	2.8 years	58,857	\$ 14.38	3.8 years
Fair value of options granted	—	—		—	\$ —	

At December 31, 2023, stock options had no intrinsic value and there were no remaining options available for grant under the Stock Option Plan. At December 31, 2023 all compensation cost and expense related to the Stock Option Plan has been recognized in prior periods.

2012 Equity Incentive Plan

The Company's 2012 Equity Incentive Plan (the "EIP"), which was approved by the Company's stockholders on May 23, 2012, authorizes the issuance of up to 180,000 shares of common stock pursuant to grants of restricted stock awards and up to 20,000 shares of common stock pursuant to grants of incentive stock options and non-qualified stock options, subject to permitted adjustments for certain corporate transactions. Employees and non-employee directors of Lake Shore Bancorp or its subsidiaries are eligible to receive awards under the EIP, except that non-employee directors may not be granted incentive stock options.

The Board of Directors granted restricted stock awards under the EIP during 2023 as follows:

Grant Date	Number of Restricted Stock Awards	Vesting	Fair Value per Share of Award on Grant Date	Awardees
January 17, 2023	2,709	100% on January 17, 2024	\$ 12.92	Non-employee directors
January 18, 2023	4,573	100% on January 18, 2024	\$ 12.90	Non-employee directors
January 18, 2023	1,000	20% per year with first vesting date on January 18, 2024	\$ 12.90	Employees

A summary of the status of unvested restricted stock awards under the EIP for the years ended December 31, 2023 and 2022 is as follows:

	At December 31, 2023	Weighted Average Grant Price (per Share)	At December 31, 2022	Weighted Average Grant Price (per Share)
Unvested shares outstanding at beginning of year	43,866	\$ 15.02	29,495	\$ 15.24
Granted	8,282	12.91	29,132	14.81
Vested	(11,734)	15.39	(4,145)	15.00
Forfeited	(22,296)	14.93	(10,616)	15.07
Unvested shares outstanding at end of period	18,118	\$ 13.91	43,866	\$ 15.02

As of December 31, 2023, there were 109,620 shares of restricted stock vested or distributed to eligible participants under the EIP and 52,261 remaining shares available for grant. Compensation expense related to restricted stock awards under the EIP amounted to \$17,000 and \$225,000 for the years ended December 31, 2023 and 2022, respectively. At December 31, 2023, \$60,000 of unrecognized compensation cost related to unvested restricted stock awards is expected to be recognized over a period of 10.2 months.

A summary of the status of stock options under the EIP for the years ended December 31, 2023 and 2022 is as follows:

	2023			2022		
	Options	Exercise Price	Remaining Contractual Life	Options	Exercise Price	Remaining Contractual Life
Outstanding at beginning of year	20,000	\$ 14.38		20,000	\$ 14.38	
Granted	—	—		—	—	
Exercised	—	—		—	—	
Forfeited	—	—		—	—	
Expired	(6,899)	\$ 14.38				
Outstanding at end of period	13,101		2.8 years	20,000	\$ 14.38	3.8 years
Options exercisable at end of period	13,101	\$ 14.38	2.8 years	20,000	\$ 14.38	3.8 years
Fair value of options granted	—	—		—	—	

At December 31, 2023, stock options outstanding had no intrinsic value and there were 6,899 remaining options available for grant under the EIP. At December 31, 2023, all compensation cost and expense related to the stock options granted under the EIP has been recognized in prior periods.

Employee Stock Ownership Plan (“ESOP”)

The Company established the ESOP for the benefit of eligible employees of the Company and Bank. All Company and Bank employees meeting certain age and service requirements are eligible to participate in the ESOP. Participants’ benefits become fully vested after five years of service once the employee is eligible to participate in the ESOP. The Company utilized \$2.6 million of the proceeds of its 2006 stock offering to extend a loan to the ESOP and the ESOP used such proceeds to purchase 238,050 shares of stock on the open market at an average price of \$10.70 per share, plus commission expenses. As a result of the purchase of shares by the ESOP, total stockholders’ equity of the Company was reduced by \$2.6 million. As of December 31, 2023, the balance of the loan to the ESOP was \$1.3 million and the fair value of unallocated shares was \$1.1 million. As of December 31, 2023, there were 74,895 allocated shares and 103,153 unallocated

shares compared to 83,467 allocated shares and 103,153 unallocated shares at December 31, 2022. The ESOP compensation expense was \$86,000 for the year ended December 31, 2023 and \$110,000 for the year ended December 31, 2022 based on 7,935 shares earned in each of those years.

Note 13 - Fair Value of Financial Instruments

Management uses its best judgment in estimating the fair value of the Company's financial instruments; however, there are inherent weaknesses in any estimation technique. Therefore, for substantially all financial instruments, the fair value estimates herein are not necessarily indicative of the amounts the Company could have realized in a sale transaction on the dates indicated. The estimated fair value amounts have been measured as of December 31, 2023 and 2022 and have not been re-evaluated or updated for purposes of these consolidated financial statements subsequent to those respective dates. The estimated fair values of these financial instruments subsequent to the respective reporting dates may be different than the amounts reported here.

GAAP establishes a fair value hierarchy that prioritizes the inputs to valuation methods used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities measurements (Level 1) and the lowest priority to unobservable input measurements (Level 3). The three levels of the fair value hierarchy are as follows:

Level 1: Unadjusted quoted prices in active markets for identical assets or liabilities that the reporting entity can access at the measurement date.

Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability either directly or indirectly.

Level 3: Unobservable inputs for determining the fair values of assets or liabilities that reflect an entity's own assumptions about the assumptions that market participants would use in pricing the assets or liabilities.

An asset's or liability's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

The Company's consolidated statements of financial condition contains investment securities and derivative instruments that are recorded at fair value on a recurring basis. For financial instruments measured at fair value on a recurring basis, the fair value measurements by level within the fair value hierarchy used at December 31, 2023 and 2022 were as follows:

	Fair Value Measurements at December 31, 2023			
	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
	(Dollars in thousands)			
Measured at fair value on a recurring basis:				
Securities:				
Debt Securities				
U.S. government agencies	\$ 1,874	\$ —	\$ 1,874	\$ —
Municipal bonds	33,050	—	33,050	—
Mortgage-backed securities:				
Collateralized mortgage obligations-private label	10	—	10	—
Collateralized mortgage obligations-government sponsored entities	10,400	—	10,400	—
Government National Mortgage Association	55	—	55	—
Federal National Mortgage Association	10,189	—	10,189	—
Federal Home Loan Mortgage Corporation	4,813	—	4,813	—
Asset-backed securities:				
Private label	31	—	31	—
Government sponsored entities	2	—	2	—
Total Debt Securities	\$ 60,424	\$ —	\$ 60,424	\$ —
Equity securities	18	18	—	—
Total Securities	\$ 60,442	\$ 18	\$ 60,424	\$ —

	Fair Value Measurements at December 31, 2022			
	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
		(Dollars in thousands)		
Measured at fair value on a recurring basis:				
Securities:				
Debt Securities				
U.S. government agencies	\$ 1,833	\$ —	\$ 1,833	\$ —
Municipal bonds	42,414	—	42,414	—
Mortgage-backed securities:				
Collateralized mortgage obligations-private label	11	—	11	—
Collateralized mortgage obligations-government sponsored entities	12,155	—	12,155	—
Government National Mortgage Association	59	—	59	—
Federal National Mortgage Association	11,246	—	11,246	—
Federal Home Loan Mortgage Corporation	5,221	—	5,221	—
Asset-backed securities:				
Private label	96	—	96	—
Government sponsored entities	4	—	4	—
Total Debt Securities	\$ 73,039	\$ —	\$ 73,039	\$ —
Equity securities	8	8	—	—
Total Securities	\$ 73,047	\$ 8	\$ 73,039	\$ —
Interest Rate Swap ⁽¹⁾	\$ 273	\$ —	\$ 273	\$ —

⁽¹⁾ Included in Other Liabilities on the consolidated statements of financial condition.

Level 2 inputs for assets or liabilities measured at fair value on a recurring basis might include quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, inputs other than quoted prices that are observable for the asset or liability (such as interest rates, volatilities, prepayment

projections, credit risks, etc.) or inputs that are derived principally from or corroborated by market data by correlation or other means. The following is a description of valuation methodologies used for financial assets recorded at fair value on a recurring basis:

- Investment securities - the fair values are determined by obtaining quoted market prices on nationally recognized securities exchanges (Level 1) or matrix pricing (Level 2), which is a mathematical technique used widely in the industry to value debt securities without relying exclusively on quoted market prices for the specific securities, but rather by relying on the securities' relationship to other benchmark quoted prices. The fair value measurements consider observable data that may include dealer quotes, market spreads, cash flows, the U.S. Treasury yield curve, live trading levels, trade execution date, market consensus prepayment projections, credit information, and the security' terms and conditions, among other things. Level 2 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, who use third party data service providers.
- Interest Rate Swap – the fair value is based on a discounted cash flow model. The model's key assumptions include the contractual term of the derivative contract, including the period to maturity, and the use of observable market based inputs, such as interest rates, yield curves, nonperformance risk and implied volatility.

In addition to disclosure of the fair value of assets on a recurring basis, GAAP requires disclosures for assets and liabilities measured at fair value on a non-recurring basis. The following is a description of the valuation methods used for assets measured at fair value on a non-recurring basis.

Collateral-Dependent Loans. Loans for which repayment is substantially expected to be provided through the operations or sale of collateral are considered collateral dependent. They are held at the lower of cost or fair value, and are considered to be measured at fair value when recorded below cost. Collateral-dependent loans are valued based on the estimated fair value of the collateral, less estimated costs to sell at the reporting date, based on either a recent appraisal or discounted cash flows based on market conditions. Accordingly, collateral-dependent loans are classified within Level 3 of the fair value hierarchy.

Foreclosed Real Estate and Repossessed Assets. Foreclosed real estate and repossessed assets are held at the lower of cost or fair value and are considered to be measured at fair value when recorded below cost. The fair value of foreclosed real estate is calculated using independent appraisals, less estimated selling costs. Certain repossessed assets may require assumptions about factors that are not observable in an active market when determining fair value. Accordingly, foreclosed real estate and repossessed assets are classified within Level 3 of the fair value hierarchy. Foreclosed real estate was \$34,000 and \$95,000 at December 31, 2023 and December 31, 2022 and was included as a component of other assets on the consolidated statements of financial condition.

Mortgage Servicing Rights. Mortgage servicing rights do not trade in an active market with readily observable market data. As a result, the Company estimates the fair value of loan servicing rights by using a discounted cash flow model to calculate the present value of estimated future net servicing income. The key assumptions used in the model include the estimated life of loans sold with servicing retained and the estimated cost to service the loans. Loan servicing rights are classified as Level 3 measurements due to the use of unobservable inputs, as well as management judgment and estimation.

For assets measured at fair value on a non-recurring basis, the fair value measurements by level within the fair value hierarchy used at December 31, 2023 and 2022 were as follows:

	Fair Value	Fair Value Measurements		Significant Other Unobservable Inputs (Level 3)
		Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	
(Dollars in thousands)				
Measured at fair value on a non-recurring basis:				
At December 31, 2023				
Collateral-dependent loans	\$ 1,369	\$ —	\$ —	\$ 1,369
Foreclosed real estate	34	—	—	34
Mortgage servicing rights	191	—	—	191
At December 31, 2022				
Mortgage servicing rights	209	—	—	209

The following table presents additional quantitative information about assets measured at fair value on a non-recurring basis and for which the Company has utilized Level 3 inputs to determine fair value:

(Dollars in thousands)	Quantitative Information about Level 3 Fair Value Measurements				
	Fair Value Estimate	Valuation Technique	Unobservable Input	Range	Weighted Average
At December 31, 2023					
Collateral-dependent loans \$	1,369	Appraisal of collateral ⁽¹⁾	Direct Disposal Costs ⁽²⁾	8.00-10.00%	9.75 %
Foreclosed real estate	34	Appraisal of collateral ⁽¹⁾	Direct Disposal Costs ⁽²⁾	8.00 %	8.00 %
Mortgage servicing rights	191	Discounted Cash Flow Model ⁽³⁾	Servicing Fees	0.25 %	0.25 %
			Servicing Costs	0.09 %	0.09 %
			Estimated Life of Loans	5.32 years	5.32 years
At December 31, 2022					
Mortgage servicing rights	209	Discounted Cash Flow Model ⁽³⁾	Servicing Fees	0.25 %	0.25 %
			Servicing Costs	0.15 %	0.15 %
			Estimated Life of Loans	5.0 years	5.0 years

⁽¹⁾ Fair value is generally determined through independent third-party appraisals of the underlying collateral, which generally includes various Level 3 inputs which are not observable.

⁽²⁾ The fair value basis of collateral-dependent loans and foreclosed real estate may be adjusted to reflect management estimates of disposal costs including, but not necessarily limited to, real estate brokerage commissions, legal fees, and delinquent property taxes.

⁽³⁾ The fair value is based on a discounted cash flow model. The model's key assumptions are the estimated life of loans sold with servicing retained and the estimated cost to service the loan.

The carrying amount and estimated fair value of the Company's financial instruments, whether carried at cost or fair value, are as follows:

	Fair Value Measurements at December 31, 2023				
	Carrying Amount	Estimated Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
	(Dollars in thousands)				
Financial assets:					
Cash and cash equivalents	\$ 53,730	\$ 53,730	\$ 53,730	\$ —	\$ —
Securities	60,442	60,442	18	60,424	—
Federal Home Loan Bank stock	2,293	2,293	—	2,293	—
Loans receivable, net	555,828	530,735	—	—	530,735
Accrued interest receivable	2,835	2,835	—	2,835	—
Bank-owned life insurance	29,355	29,355	—	29,355	—
Mortgage servicing rights	191	191	—	—	191
Financial liabilities:					
Deposits	590,924	589,243	—	589,243	—
Long-term debt	35,250	34,757	—	34,757	—
Accrued interest payable	829	829	—	829	—

	Fair Value Measurements at December 31, 2022				
	Carrying Amount	Estimated Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Other Unobservable Inputs (Level 3)
	(Dollars in thousands)				
Financial assets:					
Cash and cash equivalents	\$ 9,633	\$ 9,633	\$ 9,633	\$ —	\$ —
Securities	73,047	73,047	8	73,039	—
Federal Home Loan Bank stock	2,330	2,330	—	2,330	—
Loans receivable, net	573,537	546,278	—	—	546,278
Accrued interest receivable	2,796	2,796		2,796	
Interest rate swap	273	273	—	273	—
Mortgage servicing rights	209	209	—	—	209
Financial liabilities:					
Deposits	570,119	571,521	—	571,521	—
Short-term borrowings	12,596	12,596	—	12,596	—
Long-term debt	24,950	23,946	—	23,946	—
Accrued interest payable	66	66	—	66	—

Note 14 - Regulatory Capital Requirements

The Bank is subject to various regulatory capital requirements administered by federal banking agencies. Failure to meet minimum capital requirements can initiate certain mandatory and possible additional discretionary actions by regulators that, if undertaken, could have a direct material effect on the Company's consolidated financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Bank must meet specific capital guidelines that involve quantitative measures of the Bank's assets, liabilities, and certain off-balance-sheet items as calculated under regulatory accounting practices. The Bank's capital amounts and classifications are also subject to qualitative judgments by the regulators about components, risk-weightings and other factors. The Company is exempt from consolidated capital requirements as those requirements do not apply to certain small savings and loan holding companies or bank holding companies with consolidated assets under \$3 billion.

As a result of the Economic Growth, Regulatory Relief, and Consumer Act, the federal banking agencies have developed a minimum "Community Bank Leverage Ratio" (bank's tier 1 capital to average total consolidated assets) for financial

institutions with assets of less than \$10 billion and limited amounts of off-balance-sheet exposures and trading assets and liabilities. A “qualifying community bank” may elect to utilize the Community Bank Leverage Ratio (“CBLR”) in lieu of the general applicable risk-based capital requirements under Basel III. If the community bank’s capital levels exceed the CBLR it will be deemed to be in compliance with all other capital and leverage requirements, including the capital requirements to be considered “well capitalized” under Basel III. The federal banking agencies may consider a financial institution’s risk profile when evaluating whether it qualifies as a community bank for purposes of the capital ratio requirement. The federal banking agencies set the minimum CBLR at 9.00%. The Bank elected to be subject to the CBLR when it became effective on January 1, 2020.

As of December 31, 2023 and 2022, the Bank was considered a “qualifying community bank” and its CBLR was 12.68% and 12.40%, respectively, so it was deemed to be in compliance with all other capital and leverage requirements, including the capital requirements to be considered “well capitalized” under Prompt Corrective Action statutes.

Following is a reconciliation of the Bank’s GAAP capital to regulatory Tier 1 and CET 1 capital for December 31, 2023 and 2022:

	December 31,	
	2023	2022
	(Dollars in thousands)	
GAAP (Equity) Capital:	\$ 82,487	\$ 77,051
Plus:		
Unrealized losses on available-for-sale debt securities, net of tax	9,385	10,332
Tier 1 Capital and CET 1 Capital	<u>\$ 91,872</u>	<u>\$ 87,383</u>

Pursuant to an Individual Minimum Capital Requirement, the Bank has been directed by the OCC to maintain a Tier 1 Leverage capital ratio of 10% and a Total Risk-Based capital ratio of 13%. In order to be considered “well-capitalized” by the OCC, a savings bank must maintain a Tier 1 Leverage capital ratio of 5% and a Total Risk-Based capital ratio of 10%. At December 31, 2023, the Bank’s Tier 1 Leverage capital ratio was 12.68% and its Total Risk-Based capital ratio was 17.77% and accordingly the Bank was in compliance with its Individual Minimum Capital Requirement and was considered well-capitalized.

Note 15 – Earnings per Share

Earnings per share was calculated for the years ended December 31, 2023 and 2022, respectively. Basic earnings per share is based upon the weighted average number of common shares outstanding, exclusive of unearned shares held by the ESOP, RRP and EIP. Diluted earnings per share is based upon the weighted average number of common shares outstanding and common share equivalents that would arise from the exercise of dilutive securities. Stock options are regarded as potential common stock and are considered in the diluted earnings per share calculations to the extent they would be dilutive and computed using the treasury stock method.

The calculated basic and diluted earnings per share are as follows:

	Years Ended December 31,	
	2023	2022
Numerator – net income	\$ 4,820,000	\$ 5,708,000
Denominator:		
Basic weighted average shares outstanding	5,855,505	5,879,438
Increase in weighted average shares outstanding due to:		
Stock options ⁽¹⁾	—	—
Diluted weighted average shares outstanding ⁽¹⁾	5,855,505	5,879,438
Earnings per share:		
Basic	\$ 0.82	\$ 0.97
Diluted	\$ 0.82	\$ 0.97

⁽¹⁾ Stock options to purchase 58,857 shares under the Company's 2006 Stock Option Plan and 13,101 shares under the EIP at \$14.38 were outstanding during 2023, but were not included in the calculation of diluted earnings per share because to do so would have been anti-dilutive.

Note 16 – Commitments to Extend Credit

The Company has commitments to extend credit with off-balance sheet risk in the normal course of business to meet the financing needs of its customers. Such commitments involve, to varying degrees, elements of credit and interest rate risk in excess of the amount recognized in the consolidated statements of financial condition.

The Company's exposure to credit loss is represented by the contractual amount of these commitments. There was a \$487,000 allowance for credit losses associated with these commitments at December 31, 2023 and no loss reserve associated with these commitments at December 31, 2022. The Company follows the same credit policies in making commitments as it does for on-balance sheet instruments.

The following commitments to extend credit were outstanding as of the dates specified:

	Contract Amount	
	December 31, 2023	December 31, 2022
	(Dollars in thousands)	
Commitments to grant loans	\$ 21,045	\$ 26,334
Unfunded commitments to fund loans and lines of credit	75,721	74,848
Commercial and Standby letters of credit	1,212	-

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

Note 17 – Parent Company Only Financial Information

The following condensed financial statements summarize the financial position and results of operations and cash flows of the parent savings and loan holding company, Lake Shore Bancorp, Inc., as of December 31, 2023 and 2022 and for the years ended December 31, 2023 and 2022.

Statements of Financial Condition

	December 31,	
	2023	2022
	(Dollars in thousands)	
Assets		
Cash and due from banks	\$ 2,272	\$ 2,084
Investment in subsidiary	82,487	77,050
ESOP loan receivable	1,294	1,359
Other assets	337	721
Total assets	\$ 86,390	\$ 81,214
Liabilities and Stockholders' Equity		
Other liabilities	117	30
Total stockholders' equity	86,273	81,184
Total liabilities and stockholders' equity	\$ 86,390	\$ 81,214

Statements of Income

	For the Years Ended December 31,	
	2023	2022
	(Dollars in thousands)	
Interest Income	\$ 183	\$ 145
Dividend distributed by bank subsidiary	—	3,000
Other	7	5
Total Income	190	3,150
Non-interest Expenses	577	494
Income before income taxes and equity in undistributed net income of subsidiary	(387)	2,656
Income tax benefit	(81)	(99)
Income before undistributed net income of subsidiary	(306)	2,755
Equity in undistributed net income of subsidiary	5,126	2,953
Net Income	\$ 4,820	\$ 5,708

Statements of Comprehensive Income (Loss)

	For the Years Ended December 31,	
	2023	2022
	(Dollars in thousands)	
Net Income	\$ 4,820	\$ 5,708
Other Comprehensive Income (Loss), net of tax (expense) benefit:		
Unrealized holding gains (losses) on securities available for sale of subsidiary, net of tax (expense) benefit 2023 (\$241); 2022 \$3,004	905	(11,298)
Reclassification adjustments related to:		
Recovery on previously impaired investment securities included in net income of subsidiary, net of tax expense 2023 \$2; 2022 \$3	(5)	(12)
Net loss on sale of securities included in net income, net of tax benefit of \$12	47	—
Total Other Comprehensive Income (Loss)	947	(11,310)
Total Comprehensive Income (Loss)	\$ 5,767	\$ (5,602)

Statements of Cash Flows

	For the Years Ended December 31,	
	2023	2022
	(Dollars in thousands)	
Cash Flows from Operating Activities:		
Net income	\$ 4,820	\$ 5,708
Adjustments to reconcile net income to net cash provided by operating activities:		
ESOP shares committed to be released	86	110
Stock based compensation expense	17	225
Decrease (increase) in other assets	297	(631)
Increase in other liabilities	87	4
Equity in undistributed earnings of subsidiary	(5,126)	(2,953)
Net Cash Provided by Operating Activities	181	2,463
Cash Flows from Investing Activities:		
Payments received on ESOP loan	65	61
Net Cash Provided by Investing Activities	65	61
Cash Flows from Financing Activities:		
Purchase of treasury stock	(58)	(85)
Cash dividends paid	—	(1,440)
Net Cash Used in Financing Activities	(58)	(1,525)
Net Decrease in Cash and Cash Equivalents	188	999
Cash and Cash Equivalents - Beginning	2,084	1,085
Cash and Cash Equivalents - Ending	<u>\$ 2,272</u>	<u>\$ 2,084</u>

Note 18 – Treasury Stock

During the year ended December 31, 2023, the Company did not repurchase any shares of common stock under the existing stock repurchase program. As of December 31, 2023, there were 30,626 shares remaining to be repurchased under the existing stock repurchase program. During the year ended December 31, 2023, the Company transferred 8,282 shares of common stock out of treasury stock reserved for the 2012 Equity Incentive Plan, at an average cost of \$9.39 per share to fund awards that had been granted under the plan. During the year ended December 31, 2023, there were 22,296 shares transferred back into treasury stock reserved for the 2012 Equity Incentive Plan at an average cost of \$9.39 per share due to forfeitures. The Company repurchased 4,923 shares upon the vesting of shares under the 2012 Equity Incentive Plan for the purpose of remitting payroll taxes on behalf of awardees who were employees, at an average cost of \$11.60 per share, during the year ended December 31, 2023.

During the year ended December 31, 2022, the Company repurchased 5,701 shares of common stock at an average cost of \$14.91 per share. These shares were repurchased pursuant to the Company's publicly announced common stock repurchase program. As of December 31, 2022, there were 30,626 shares remaining to be repurchased under the existing stock repurchase program. During the year ended December 31, 2022, the Company transferred 29,132 shares of common stock out of treasury stock reserved for the 2012 Equity Incentive Plan, at an average cost of \$9.39 per share to fund awards that had been granted under the plan. During the year ended December 31, 2022, there were 10,616 shares transferred back into treasury stock reserved for the 2012 Equity Incentive Plan at an average cost of \$9.39 per share due to forfeitures.

Note 19 – Other Comprehensive Income (Loss)

In addition to presenting the consolidated statements of comprehensive income (loss) herein, the following table shows the tax effects allocated to the Company's single component of other comprehensive income (loss) for the periods presented:

	For the Years Ended December 31, 2023			For The Years Ended December 31, 2022		
	Pre-Tax Amount	Tax (Expense) Benefit	Net of Tax Amount	Pre-Tax Amount	Tax Benefit	Net of Tax Amount
(Dollars in thousands)						
Net unrealized gains (losses) on securities available for sale:						
Net unrealized gains (losses) arising during the period	\$ 1,146	\$ (241)	\$ 905	\$ (14,302)	\$ 3,004	\$ (11,298)
Less: reclassification adjustment related to:						
Loss on sale of securities included in net income	59	(12)	47	—	—	—
Recovery on previously impaired investment securities included in net income	(7)	2	(5)	(15)	3	(12)
Total Other Comprehensive Income (Loss)	\$ 1,198	\$ (251)	\$ 947	\$ (14,317)	\$ 3,007	\$ (11,310)

The following table presents the amounts reclassified out of the single component of the Company's accumulated other comprehensive loss for the indicated periods:

Details about Accumulated Other Comprehensive Loss Components	Amounts Reclassified from Accumulated Other Comprehensive Loss for the years ended December 31,		Affected Line Item on the Consolidated Statements of Income
	2023	2022	
(Dollars in thousands)			
Net unrealized gains (losses) on securities available for sale:			
Loss on sale of securities included in net income	\$ 59	\$ —	Loss on sale of securities available for sale
Recovery on previously impaired investment securities	(7)	(15)	Recovery on previously impaired investment securities
Provision for income tax (benefit) expense	(10)	3	Income tax expense
Total reclassification for the period	\$ 42	\$ (12)	Net Income

Note 20 – Revenue Recognition

The Company's non-interest revenue streams primarily result from services it provides to its deposit customers. When a customer makes a deposit, the Company records a liability because the Company has an obligation to deliver cash to its customer on demand. A contract between the Company and a deposit account customer is typically documented in writing and is often terminable at will by the customer alone or by both the customer and the Company without penalty. The term of a deposit contract between a customer and the Company will likely be day-to-day or minute-to-minute, and the termination clause is likely similar to a renewal right where each day or minute represents the renewal of the contract. The Company generally fully satisfies its performance obligations on its contracts with customers as services are rendered and the transaction prices are typically fixed; charged either on a periodic basis or based on activity.

Debit Card Fees

Debit card fees are primarily comprised of interchange fees earned whenever the Company's debit cards are used to purchase goods or services from a merchant via a card payment network, such as MasterCard. Interchange fees from cardholder transactions represent a percentage of the underlying transaction value. The Company's performance obligation for

interchange income are largely satisfied, and related revenue recognized, when the services are rendered or upon completion. Payment is typically immediately.

Service Charges on Deposit Accounts

Service charges and fees on deposit accounts consist of transaction-based fees, account maintenance fees, and overdraft service fees for various retail and business deposit customers. Transaction-based fees, such as stop payment charges, are recognized at the time the Company fulfills the customer's request. Account maintenance fees, which relate primarily to monthly maintenance, are earned over the course of a month, representing the period over which the Company satisfies the performance obligation. Overdraft fees are recognized at the point in time that the overdraft occurs. Service charges on deposits are withdrawn directly from the customer's account balance.

Fees and Other Service Charges

Fees and other service charges are primarily comprised of ATM fees, merchant services income and other service charges. ATM fees are comprised of fees earned whenever a Company's ATM or debit card is used at a non-Company ATM or a non-Company cardholder uses a Company ATM. ATM fees represent a fixed fee for the convenience to cardholders for accessibility of funds. Merchant services income mainly represents fees charged to merchants serviced by a third party vendor under contract with the Company for debit or credit card processing, and represents a percentage of the underlying transaction value. Other service charges include revenue from services provided to our retail or business customers, which may include fees for wire transfer processing, bill pay services, cashier's checks and other services. The Company's performance obligation for fees and other service charges are largely satisfied, and related revenue recognized, when the services are rendered or upon completion. Payment is typically immediately or in the following month.

Other

Other non-interest income consists of safe deposit rental fees. Safe deposit box rental fees are charged to the customer on an annual basis and recognized upon receipt of payment. The Company determined that since rentals and renewals occur fairly consistently over time, revenue is recognized on a basis consistent with the duration of the performance obligation.

Gain/Losses on Sale of Foreclosed Real Estate

The Company records a gain or loss from the sale of foreclosed real estate when control of the property transfers to the buyer, which generally occurs at the time of an executed deed. When the Company finances the sale of foreclosed real estate to the buyer, the Company assesses whether the buyer is committed to perform their obligations under the contract and whether collectability of the transaction price is probable. Once these criteria are met, the foreclosed real estate asset is derecognized and the gain or loss on sale is recorded upon the transfer of control of the property to the buyer. In determining the gain or loss on the sale, the Company may need to adjust the transaction price and related gain (loss) on sale if a significant financing component is present. Gains (losses) on the sale of foreclosed real estate are generally recorded in non-interest expense on the consolidated statements of income as an offset to foreclosed real estate expenses. There were no sales of foreclosed real estate during the years ended December 31, 2023 and 2022, where the Company financed the sale of the property.

Contract Balances

The Company's non-interest revenue streams are largely based on transactional activity. Consideration is often received immediately or shortly after the Company satisfies its performance obligation and revenue is recognized. The Company does not typically enter into long-term revenue contracts with customers, and therefore, does not experience significant contract balances. As of December 31, 2023 and 2022, the Company did not have any significant contract balances.

The following presents non-interest income, segregated by revenue streams in-scope and out-of-scope of Topic 606, for the years ended December 31, 2023 and 2022:

	For the years ended December 31,	
	2023	2022
	(Dollars in thousands)	
<u>Non-Interest Income</u>		
In-Scope of Topic 606:		
Debit card fees	\$ 846	\$ 846
Service charges on deposit accounts	709	727
Fees and other service charges	127	126
Other	34	37
Non-interest Income (in-scope of Topic 606)	1,716	1,736
Non-interest Income (out of scope of Topic 606)	919	968
Total Non-Interest Income	\$ 2,635	\$ 2,704

Subsidiaries of Lake Shore Bancorp, Inc.

Company

Lake Shore Savings Bank

Percent Owned

100.0% by Lake Shore Bancorp, Inc.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statements on Form S-8 (No. 333-141829 and No. 333-185624) of Lake Shore Bancorp, Inc. and subsidiary of our report dated March 22, 2024, relating to the consolidated financial statements, which appears in this annual report on Form 10-K for the year ended December 31, 2023.

/s/ Baker Tilly US, LLP
Pittsburgh, Pennsylvania
March 22, 2024

**CERTIFICATION
PURSUANT TO 17 CFR 240.13a-14
PROMULGATED UNDER
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Kim C. Liddell, certify that:

1. I have reviewed this annual report on Form 10-K of Lake Shore Bancorp, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the consolidated financial statements, and other financial information included in this report, fairly present in all material respects the consolidated financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies or material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial data; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 22, 2024

/s/ Kim C. Liddell

Kim C. Liddell

President and Chief Executive Officer

**CERTIFICATION
PURSUANT TO 17 CFR 240.13a-14
PROMULGATED UNDER
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Taylor M. Gilden, certify that:

1. I have reviewed this annual report on Form 10-K of Lake Shore Bancorp, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the consolidated financial statements, and other financial information included in this report, fairly present in all material respects the consolidated financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles;
 - c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a. All significant deficiencies or material weaknesses in the design or operation of internal controls over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial data; and
 - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 22, 2024

/s/ Taylor M. Gilden

Taylor M. Gilden

Chief Financial Officer

**CERTIFICATE PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Lake Shore Bancorp, Inc. (the “Company”) on Form 10-K for the year ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Kim C. Liddell, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

- 1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and
- 2) The information contained in the Report fairly presents, in all material respects, the consolidated financial condition and results of operations of the Company as of the dates and for the periods covered by the Report.

March 22, 2024

/s/ Kim C. Liddell

Kim C. Liddell

President and Chief Executive Officer

**CERTIFICATE PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Lake Shore Bancorp, Inc. (the “Company”) on Form 10-K for the year ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Taylor M. Gilden, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that:

- 1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (15 U.S.C. 78m or 78o(d)); and
- 2) The information contained in the Report fairly presents, in all material respects, the consolidated financial condition and results of operations of the Company as of the dates and for the periods covered by the Report.

March 22, 2024

/s/ Taylor M. Gilden

Taylor M. Gilden
Chief Financial Officer

LAKE SHORE BANCORP, INC. CLAWBACK POLICY

The Board of Directors (the “Board”) of Lake Shore Bancorp, Inc. (the “Company”) believes that it is in the best interests of the Company and its shareholders to adopt this Clawback Policy (this “Policy”), which provides for the recovery of certain incentive compensation in the event of an accounting restatement.

The Company has adopted this Policy as a supplement to any other clawback policies or provisions in effect now or in the future at the Company. To the extent this Policy applies to compensation payable to a person covered by this Policy, it shall supersede any other conflicting provision or policy maintained by the Company and shall be the only clawback policy applicable to such compensation and no other clawback policy shall apply; provided that, if such other policy or provision provides that a greater amount of such compensation shall be subject to clawback, such other policy or provision shall apply to the amount in excess of the amount subject to clawback under this Policy.

This Policy shall be interpreted to comply with the clawback rules found in 17 C.F.R. §240.10D and the related listing rules of the national securities exchange or national securities association (the “Exchange”) on which the Company has listed securities, and, to the extent this Policy is in any manner deemed inconsistent with such rules, this Policy shall be treated as retroactively amended to be compliant with such rules.

1. Definitions.

(a) “Executive Officer” means the Company’s president, principal financial officer, principal accounting officer (or if there is no such accounting officer, the controller), any vice-president of the Company in charge of a principal business unit, division, or function (such as sales, administration, or finance), any other officer who performs a policy-making function, or any other person who performs similar policy-making functions for the Company. An executive officer of the Company’s parent or subsidiary is deemed an “Executive Officer” if the executive officer performs policy making functions for the Company.

(b) “Financial Reporting Measure” means any measure that is determined and presented in accordance with the accounting principles used in preparing the Company’s financial statements, and any measure that is derived wholly or in part from such measure; provided, however, that a Financial Reporting Measure is not required to be presented within the Company’s financial statements or included in a filing with the Securities and Exchange Commission to qualify as a “Financial Reporting Measure.” For purposes of this Policy, “Financial Reporting Measure” includes, but is not limited to, stock price and total shareholder return.

(c) “Incentive-Based Compensation” means any compensation that is granted, earned, or vested based wholly or in part upon the attainment of a Financial Reporting Measure.

(d) “Received” means incentive-based compensation received in the Company’s fiscal period during which the Financial Reporting Measure specified in the incentive-based compensation award is attained, even if the payment or grant of the incentive-based compensation occurs after the end of that period.

2. Application of the Policy. This Policy shall only apply in the event that the Company is required to prepare an accounting restatement due to its material noncompliance with any financial reporting requirement under the Federal securities laws, including any required accounting restatement to correct an error in previously issued financial statements that is material to the previously issued financial statements, or that would result in a material misstatement if the error were corrected in the current period or left uncorrected in the current period.

3. Recovery Period. The Incentive-Based Compensation subject to clawback is the Incentive-Based Compensation Received during the three completed fiscal years immediately preceding the date that the Company is required to prepare an accounting restatement as described in Section 2; provided that the individual served as an Executive Officer at any time during the performance period applicable to the Incentive-Based Compensation in question. The date that the Company is required to prepare an accounting restatement shall be determined pursuant to 17 C.F.R. §240.10D-1(b)(1)(ii).

(a) Notwithstanding the foregoing, the Policy shall only apply if the Incentive-Based Compensation is Received (1) while the Company has a class of securities listed on an Exchange and (2) on or after October 2, 2023.

(b) See 17 C.F.R. §240.10D-1(b)(1)(i)(D) for certain circumstances under which this Policy will apply to Incentive-Based Compensation received during a transition period arising due to a change in the Company's fiscal year.

4. Erroneously Awarded Compensation. The amount of Incentive-Based Compensation subject to the Policy ("Erroneously Awarded Compensation") is the amount of Incentive-Based Compensation Received that exceeds the amount of Incentive Based-Compensation that otherwise would have been Received had it been determined based on the restated amounts in the Company's financial statements and shall be computed without regard to any taxes paid.

(a) For Incentive-Based Compensation based on stock price or total shareholder return, where the amount of Erroneously Awarded Compensation is not subject to mathematical recalculation directly from the information in an accounting restatement: (1) the amount shall be based on a reasonable estimate of the effect of the accounting restatement on the stock price or total shareholder return upon which the Incentive-Based Compensation was received; and (2) the Company must maintain documentation of the determination of that reasonable estimate and provide such documentation to the Exchange.

5. Recovery Exceptions. The Company shall recover reasonably promptly any Erroneously Awarded Compensation except to the extent that the conditions of paragraphs (a), (b), or (c) below apply. The Compensation Committee of the Board of Directors (the "Committee") shall determine the repayment schedule for each amount of Erroneously Awarded Compensation in a manner that complies with this "reasonably promptly" requirement. Such determination shall be consistent with any applicable legal guidance, by the Securities and Exchange Commission, judicial opinion, or otherwise. The determination of "reasonably promptly" may vary from case to case and the Committee is authorized to adopt additional rules to further describe what repayment schedules satisfy this requirement.

(a) Erroneously Awarded Compensation need not be recovered if the direct expense paid to a third party to assist in enforcing the Policy would exceed the amount to be recovered and the Committee has made a determination that recovery would be impracticable. Before

concluding that it would be impracticable to recover any amount of Erroneously Awarded Compensation based on expense of enforcement, the Company shall make a reasonable attempt to recover such Erroneously Awarded Compensation, document such reasonable attempt(s) to recover, and provide that documentation to the Exchange, as required.

(b) If applicable, Erroneously Awarded Compensation need not be recovered if recovery would violate home country law where that law was adopted prior to November 28, 2022. Before concluding that it would be impracticable to recover any amount of Erroneously Awarded Compensation based on violation of home country law, the Company shall obtain an opinion of home country counsel, acceptable to the Exchange, that recovery would result in such a violation and shall provide such opinion to the Exchange.

(c) Erroneously Awarded Compensation need not be recovered if recovery would likely cause an otherwise tax-qualified retirement plan, under which benefits are broadly available to employees of the Company, to fail to meet the requirements of 26 U.S.C. §401(a)(13) or 26 U.S.C. §411(a) and regulations thereunder.

6. Committee Decisions. Decisions of the Committee with respect to this Policy shall be final, conclusive and binding on all Executive Officers subject to this Policy, unless determined by a court of competent jurisdiction to be an abuse of discretion.

7. No Indemnification. Notwithstanding anything to the contrary in any other policy of the Company or any agreement between the Company and an Executive Officer, no Executive Officer shall be indemnified by the Company against the loss of any Erroneously Awarded Compensation.

8. Agreement to Policy by Executive Officers. The Committee shall take reasonable steps to inform Executive Officers of this Policy and the Executive Officers shall acknowledge receipt and adherence to this Policy in writing.

9. Exhibit Filing Requirement. A copy of this Policy and any amendments thereto shall be filed as an exhibit to the Company's annual report on Form 10-K.

10. Amendment. The Board may amend, modify or supplement all or any portion of this Policy at any time and from time to time in its discretion.

[TO BE SIGNED BY EACH OF THE COMPANY'S EXECUTIVE OFFICERS]

Clawback Policy Acknowledgment

I, the undersigned, agree and acknowledge that I am fully bound by, and subject to, all of the terms and conditions of Lake Shore Bancorp, Inc.'s Clawback Policy (as may be amended, restated, supplemented or otherwise modified from time to time, the "**Policy**") and that I have been provided a copy of the Policy. In the event of any inconsistency between the Policy and the terms of any employment or similar agreement to which I am a party, or the terms of any compensation plan, program or agreement under which any compensation has been granted, awarded, earned or paid, the terms of the Policy shall govern. If the Committee determines that any amounts granted, awarded, earned or paid to me must be forfeited or reimbursed to the Company, I will promptly take any action necessary to effectuate such forfeiture and/or reimbursement.

Name

Date:

Title
