Lake Shore Bancorp, Inc.

# ANNUAL REPORT
# 2024

# Lake Shore Bancorp, Inc.

I am pleased to report Lake Shore earned net income of $4.9 million in 2024 versus $4.8 million in 2023. While the net income increase may seem modest, in 2024, we accomplished several important and significant strategic plan initiatives. We achieved our goal of the early termination from the Consent Order issued by the Office of the Comptroller of the Currency, early termination of the Written Agreement with the Federal Reserve Bank, we reinstituted and paid quarterly dividends to you, our shareholders, and increased earnings per share by 7%. In addition, we strengthened the Bank's balance sheet by replacing Federal Home Loan Bank advances and brokered certificates of deposit totaling $41 million with organic deposit growth. Without doubt 2024 was a momentous year for Lake Shore.

We believe 2025 will bring much opportunity for Lake Shore and its shareholders. As previously announced in January 2025, the Board of Directors adopted a Plan of Conversion and Reorganization where Lake Shore, MHC will undertake a "second step" conversion from the mutual holding company structure to the stock holding company structure. In connection with that second step conversion, the Bank intends to convert its charter to a New York State commercial bank. The conversion and "second step" will create significant growth opportunities unavailable to Lake Shore as a mutual savings bank. As a New York State charted bank, Lake Shore will be able to do business with municipalities and public entities and better support the Chautauqua and Erie County communities. The proposed new capital will give us significant flexibility to grow and continue our 134 years of serving consumers and businesses as an independent local community bank.

None of Lake Shore's achievements have been possible without the dedicated work of our team members. We recognize that our most valuable asset is our people. Maintaining a talented and engaged workforce is the key to delivering exceptional and personalized service while enhancing our digital offerings. Their efforts will help us continue to improve our operational efficiency and ensure that we continuously meet the needs of our customers in a secure and safe manner. We remain focused on attracting top talent and fostering an environment where employees are empowered to grow, collaborate, and contribute to our shared success.

Lake Shore believes our success is deeply tied to the well-being and growth of the communities we serve. In 2024, the Bank and its team members reinforced our commitment to the region by supporting more than 70 initiatives throughout Chautauqua and Erie Counties. From the West Falls Center for the Arts and the Roycroft Campus to the Fredonia High School Women in STEM Scholarship and the Chautauqua County Rural Ministry, we continue to contribute to organizations dedicated to improving and enriching the lives and communities of Western New York. We are proud to be a longstanding sponsor of the TRC Golf Classic, the major fundraising event for Filling the Gap, Inc., a Jamestown-based non-profit organization that supports people with disabilities and other socioeconomic challenges in Chautauqua County. In addition, we continue to support the Orchard Park Police Foundation, Chautauqua Safety Village, Cleveland Hill Fire Department, and Erie County Fair. Throughout our 134 years of existence, our mission of "Putting People First" is a commitment to improve the lives of individuals and support businesses in the markets we serve.

We, the Board and Management Team, thank you, our shareholders, for your continued trust and loyal support. As we move into 2025, with a strong foundation and clear strategic direction, we remain optimistic about our prospects. We look forward to another successful year, deeper community impact, and enhanced value for our shareholders.

Thank you for your ongoing support.

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|---|---|
| ***Kim C. Liddell*** | ***Kevin M. Sanvidge*** |
| President and Chief Executive Officer | Chairman of the Board |

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Lake Shore Bancorp, Inc.

April 11, 2025

Dear Shareholder:

We cordially invite you to attend the Annual Meeting of Shareholders of Lake Shore Bancorp, Inc. (the "Annual Meeting"). The Annual Meeting will be held at Lake Shore Bancorp, Inc., 31 East Fourth Street, Dunkirk, New York 14048 on May 21, 2025 at 8:30 a.m., Eastern Time.

The enclosed Notice of Annual Meeting and Proxy Statement describe the formal business to be transacted. In addition to the formal items of business, management will report on the operations and activities of Lake Shore Bancorp, Inc. and you will have an opportunity to ask questions.

At the Annual Meeting, shareholders will be asked to vote on the following matters:

- election of three directors for a three-year term;
- advisory approval of a non-binding resolution regarding the compensation of our named executive officers;
- ratification of the appointment of Yount, Hyde & Barbour, P.C. as the independent registered public accounting firm of Lake Shore Bancorp, Inc. for the year ending December 31, 2025; and
- transaction of such other business as may properly come before the 2025 annual meeting.

For the reasons set forth in the Proxy Statement, the Board of Directors unanimously recommends that you vote **FOR** each of the above noted matters.

We are pleased to take advantage of the Securities and Exchange Commission rule allowing companies to furnish proxy materials to their shareholders over the Internet. On or about April 11, 2025, we began mailing a Notice of Internet Availability of Proxy Materials (the "Notice") containing instructions on how to access our Proxy Statement and Annual Report and vote online. The Notice also explains how you may request to receive a paper copy of the Proxy Statement and Annual Report, as well as a paper proxy card.

**Whether or not you are able to attend the Annual Meeting, and regardless of the number of shares you own, your vote is important and we encourage you to vote promptly.** You may vote your shares via a toll-free telephone number, over the Internet or on a paper proxy card if you request one. Instructions regarding the methods of voting are contained on the Notice and proxy card. Voting by proxy will not prevent you from voting in person at the Annual Meeting, but will ensure that your vote is counted if you are unable to attend.

The Board of Directors and the employees of Lake Shore Bancorp, Inc. are committed to our continued success and the enhancement of your investment.

Sincerely yours,
/s/ Kim C. Liddell

Kim C. Liddell
*President and Chief Executive Officer*

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Lake Shore Bancorp, Inc.

**NOTICE OF ANNUAL MEETING OF SHAREHOLDERS**

**Date:** **May 21, 2025**
**Time:** **8:30 a.m., Eastern Time**
**Place:** **Lake Shore Bancorp, Inc.**
**31 East Fourth Street**
**Dunkirk, New York 14048**

At the Annual Meeting, we will ask you to vote on the following matters:

1. **Election of Directors:** Elect three Class Two directors to serve until the 2028 annual meeting.

2. **Say on Pay Proposal:** A non-binding "say on pay" proposal to approve the compensation of our named executive officers.

3. **Appointment of Independent Registered Public Accounting Firm:** Ratify the appointment of Yount, Hyde & Barbour, P.C. as the Company's independent registered public accounting firm for the year ending December 31, 2025.

4. **Other Business:** Any other business properly brought before the shareholders at the meeting, and any adjournment or postponement thereof. Please note that at this time we are not aware of any such business.

You may vote your shares of common stock if you owned the shares at the close of business on March 24, 2025, the record date. Whether or not you are able to attend the meeting, and regardless of the number of shares you own, your vote is important and we encourage you to vote promptly.

By Order of the Board of Directors,

/s/ Eric Hohenstein
Eric Hohenstein
*Corporate Secretary*

Dunkirk, New York
April 11, 2025

**You are cordially invited to attend the Annual Meeting of Shareholders. It is important that your shares be represented regardless of the number of shares you own. The Board of Directors urges you to vote your shares promptly. You may vote your shares via a toll-free telephone number, over the Internet or on a paper proxy card if you request one. Voting your shares via proxy will not prevent you from voting in person if you attend the Annual Meeting.**

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**Lake Shore Bancorp, Inc.**

**31 East Fourth Street**
**Dunkirk, New York 14048**
**(716) 366-4070**

# PROXY STATEMENT

## INFORMATION ABOUT THE ANNUAL MEETING

### General Information

This proxy statement contains information about the 2025 Annual Meeting of Shareholders of Lake Shore Bancorp, Inc. This proxy statement refers to Lake Shore Bancorp, Inc. as the "Company," "we," "us," or "our." The Company is the holding company for Lake Shore Savings Bank, which we refer to as "Lake Shore Savings" or as the "Bank."

### Availability of Proxy Materials

On April 11, 2025, we began mailing a Notice of Internet Availability of Proxy Materials (the "Notice") to all shareholders entitled to vote, which contains instructions on how to access this proxy statement and the 2024 Annual Report and how to vote. You may also request that a printed copy of the proxy materials be sent to you. You will not receive a printed copy of the proxy materials unless you request one in the manner set forth in the Notice. The proxy materials are all available on the internet at the following website: http://www.edocumentview.com/LSBK.

In accordance with Securities and Exchange Commission ("SEC") rules, the materials on the foregoing website are searchable, readable and printable, and the website does not use "cookies," track user moves, or gather any personal information.

### Date, Time and Place of Meeting

The Annual Meeting of the Shareholders of the Company will be held at 8:30 a.m., Eastern Time, on Wednesday, May 21, 2025, at Lake Shore Bancorp, Inc., 31 East Fourth Street, Dunkirk, New York 14048.

### Purpose of the Meeting

The shareholders will be asked to consider and vote upon the following matters at the meeting:

- the election of three Class Two directors to serve until the 2028 Annual Meeting. Upon the recommendation of the Nominating and Corporate Governance Committee, the following three candidates have been nominated by our Board of Directors:

**Class Two Directors**

- Kevin M. Sanvidge
- Sharon E. Brautigam
- Ann M. Segarra

- a non-binding "say on pay" proposal to approve the compensation of the named executive officers;
- ratify the appointment of Yount, Hyde & Barbour, P.C. as the Company's independent registered public accounting firm for the year ending December 31, 2025; and
- such other business as may be properly brought before the meeting and any adjournment or postponement thereof.

### Solicitation of Proxies

We will pay all costs with respect to this Proxy Statement and related materials as well as soliciting proxies from shareholders. Regular employees of Lake Shore Bancorp and Lake Shore Savings may solicit proxies in person, by mail or by telephone, but no employee will receive any compensation for solicitation activities in addition to his or her regular compensation. Expenses may include the charges and expenses of brokerage houses, nominees, custodians and fiduciaries for forwarding proxies and proxy materials to beneficial owners of shares.

## VOTING PROCEDURES

### Who Can Vote?

Our Board of Directors has fixed the close of business on March 24, 2025 as the record date for the determination of shareholders entitled to notice of, and to vote at, the Annual Meeting. Accordingly, only holders of record of our shares of common stock at the close of business on such date will be entitled to vote at the Annual Meeting. On March 24, 2025, there were 5,760,272 shares outstanding, of which 3,636,875 of those shares, or 63.1%, are owned by Lake Shore, MHC, our top-tier federal mutual holding company.

### Quorum

A quorum of shareholders is necessary to hold a valid meeting. If the holders of at least a majority of the total number of our outstanding shares of common stock entitled to vote are represented in person or by proxy at the Annual Meeting, a quorum will exist. Because Lake Shore, MHC, the top tier holding company for Lake Shore Bancorp, Inc. and Lake Shore Savings Bank, owns greater than a majority of our outstanding shares of common stock, representation of Lake Shore, MHC at the Annual Meeting will constitute a quorum. We will include proxies marked as abstentions and broker non-votes, as applicable, to determine the number of shares present at the Annual Meeting.

### How Many Votes You Have

Each holder of shares of common stock outstanding on March 24, 2025 will be entitled to one vote for each share held of record at the Annual Meeting.

### How To Vote

You may vote your shares at the Annual Meeting in person or by proxy. To vote in person, you must attend the Annual Meeting and obtain and submit a ballot, which we will provide to you at the Annual Meeting. The Notice provides instructions on how to access your proxy card and contains instructions on how to vote via telephone or the Internet. For those shareholders who request a paper proxy card, instructions for voting via telephone and the Internet are set forth on the proxy card. Those shareholders who receive a paper proxy card and voting instructions by mail, and who elect to vote by mail, should sign and return the proxy card in the prepaid and addressed envelope that was enclosed with the proxy materials. All properly executed proxies we receive prior to the Annual Meeting will be voted in accordance with the instructions marked on the proxy card. **In the event you return an executed proxy card without marking your instructions, your executed proxy will be voted FOR the proposals identified in the Notice of the Annual Meeting of Shareholders.**

If you are a shareholder whose shares are not registered in your own name, you will need appropriate documentation from your broker or other holder of record to vote personally at the Annual Meeting.

If any other matter is presented at the Annual Meeting, the Board of Directors will vote the shares represented by all properly executed proxies on such matters as a majority of our Board of

Directors determines. As of the date of this proxy statement, we know of no other matters that may be presented at the Annual Meeting, other than those listed in the Notice of Annual Meeting.

We are soliciting proxies only for the Annual Meeting. If you grant us a proxy to vote your shares, the proxy will only be exercised at the Annual Meeting.

### Vote by Lake Shore, MHC

As of March 24, 2025, Lake Shore, MHC owned 63.1% of the outstanding shares of our common stock. Those shares will be voted in accordance with the instructions of Lake Shore, MHC's Board of Directors. Lake Shore, MHC is expected to vote FOR the election of each of the nominees for director, FOR the non-binding resolution approving, on an advisory basis, the compensation of our named executive officers, and FOR the ratification of the appointment of Yount, Hyde & Barbour, P.C. as the Company's independent registered public accounting firm for the year ending December 31, 2025.

### Broker Non-Votes

If your broker holds shares that you own in "street name," the broker generally may vote your shares on routine matters even if the broker does not receive instructions from you. "Broker non-votes" are proxies received from brokers or other nominees holding shares on behalf of their clients who have not been given specific voting instructions from their clients with respect to non-routine matters.

### Vote Required

- ***Election of Directors***. The nominees for director who receive the most votes will be elected. So, if you do not vote for a nominee, or you indicate "withhold authority" for any nominee on your proxy card, your vote will not count "for" the nominee. You may not vote your shares cumulatively for the election of directors. Brokers are not entitled to use their discretion to vote uninstructed proxies with respect to the election of directors, and any such "broker non-votes" will not be deemed a vote cast. Because Lake Shore, MHC owns more than 50% of our outstanding shares, we expect that Lake Shore, MHC will control the outcome of the vote on this proposal. Lake Shore, MHC intends to vote for the nominees.

- ***Advisory Vote on Compensation of Named Executive Officers.*** The non-binding resolution approving, on an advisory basis, the compensation of our named executive officers will be approved if a majority of the votes cast in person or by proxy at the Annual Meeting and entitled to vote on this proposal are voted in favor of the proposal. If you "abstain" from voting on this proposal, it will not be voted or treated as a vote cast, although it will be counted for purposes of determining whether a quorum is present. Accordingly, an abstention will not affect the outcome of the proposal. Brokers are not entitled to use their discretion to vote uninstructed proxies with respect to this proposal, and any such "broker non-votes" will not be deemed a vote cast. Because Lake Shore, MHC owns more than 50% of our outstanding shares, we expect that Lake Shore, MHC will control the outcome of the vote on this proposal. Lake Shore, MHC intends to vote for this proposal.

- ***Ratification of the Appointment of Yount, Hyde & Barbour, P.C.*** The affirmative vote of the holders of a majority of the votes cast in person or by proxy at the Annual Meeting and entitled to vote on this proposal is required to ratify this proposal. Brokers are entitled to use their discretion to vote uninstructed proxies with respect to this proposal. If you "abstain" from voting on this proposal, it will not be voted or treated as a vote cast, although it will be counted for purposes of determining whether a quorum is present. Accordingly, an abstention will not affect the outcome of the proposal. Because Lake Shore, MHC owns more than 50% of our outstanding shares, we expect that Lake Shore, MHC will control the outcome of the vote on this proposal. Lake Shore, MHC intends to vote for this proposal.

**Changing Your Vote After Return of Proxy**

You may revoke your grant of proxy at any time before it is voted at the Annual Meeting of Shareholders by:

- delivering a written notice of revocation to Eric Hohenstein, Corporate Secretary, Lake Shore Bancorp, Inc., 31 East Fourth Street, Dunkirk, New York 14048;
- submitting a new proxy over the Internet or by telephone;
- submitting a signed proxy card bearing a later date; or
- attending the Annual Meeting and voting in person, but you also must file a written revocation with the Secretary of the Annual Meeting prior to voting.

Your last vote is the vote that will be counted.

## SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

### Principal Shareholders

Persons and groups who beneficially own in excess of 5% of the Company's common stock are required to file certain reports with the Securities and Exchange Commission (the "SEC") regarding such ownership. The following table sets forth, as of March 24, 2025, the only persons known by us to be beneficial owners of more than 5% of our common stock. Addresses provided are those listed in the SEC filings as the address of the person authorized to receive notices and communications.

For purposes of the table below and the table set forth under "*Common Stock Beneficially Owned by Directors and Executive Officers*," a person is deemed to be the beneficial owner of any shares of common stock (1) over which he or she has or shares, directly or indirectly, voting or investment power; or (2) of which he or she has the right to acquire beneficial ownership at any time within 60 days after March 24, 2025. "Voting power" is the power to vote or direct the voting of shares and "investment power" includes the power to dispose or direct the disposition of shares.

| Name and Address of Beneficial Owner | Amount and Nature of Beneficial Ownership | Percent of Class[1] |
|---|---|---|
| Lake Shore, MHC<br>125 East Fourth Street<br>Dunkirk, NY 14048 | 3,636,875 [2] | 63.1% |

(1) Calculated on the basis of 5,760,272 shares of common stock, the total number of shares of common stock outstanding as of March 24, 2025.

(2) Based on information reported by Lake Shore, MHC in a Schedule 13D filing with the SEC on April 13, 2006.

## Common Stock Beneficially Owned by Directors and Executive Officers

The following table sets forth information about the shares of common stock beneficially owned by each of our directors, each of our executive officers, and all of our directors and executive officers as a group as of March 24, 2025. Except as otherwise indicated, each person and each group shown in the table has sole voting and investment power with respect to the shares of common stock indicated.

| Name of Beneficial Owner | Amount and Nature of Beneficial Ownership | Number of Unexercised Stock Options Which are Included in Beneficial Ownership(1) | Percentage of Shares of Common Stock Outstanding(2) |
|---|---|---|---|
| Sharon E. Brautigam, Vice Chairperson of the Board | 17,258 (3) | 379 | * |
| Michelle M. DeBergalis, Director | 1,970 (4) | — | * |
| Taylor M. Gilden, Chief Financial Officer and Treasurer | 9,047 (5) | — | * |
| Kim C. Liddell, President, Chief Executive Officer and Director | 42,656 (6) | — | * |
| John P. McGrath, Director | 29,679 (7) | — | * |
| Jack L. Mehltretter, Director | 15,076 (8) | 1,102 | * |
| Ronald J. Passafaro, Director | 16,757 (9) | — | * |
| Kevin M. Sanvidge, Chairman of the Board | 35,993 (10) | 11,128 | * |
| Ann M. Segarra, Director | 24,249 (11) | — | * |
| Jeffrey M. Werdein, Executive Vice President, Commercial Division | 45,628 (12) | 17,073 | * |
| All directors and executive officers as a group (10 persons) | 238,313 (13) | 29,682 | 4.1% |

* Less than 1.00% of common stock outstanding.

(1) These options are exercisable within 60 days of March 24, 2025. They cannot be voted until exercised.

(2) Percentages with respect to each person or group of persons have been calculated on the basis of 5,789,954 shares of common stock, the total number of shares of common stock outstanding as of March 24, 2025, plus the number of shares that each person or group of persons have the right to acquire within 60 days of March 24, 2025.

(3) Includes 350 shares held by Ms. Brautigam's spouse and 1,333 shares of unvested restricted stock over which Ms. Brautigam has sole voting power but no investment power.

(4) Includes 116 shares held in Ms. DeBergalis' individual retirement account and 1,056 shares of unvested restricted stock over which Ms. DeBergalis has sole voting power but no investment power.

(5) Includes 1,862 shares held in Mr. Gilden's individual retirement account, 265 shares held in Lake Shore Bancorp's Employee Stock Ownership Plan over which Mr. Gilden has sole voting power and no investment power and 6,920 shares of unvested restricted stock over which Mr. Gilden has sole voting power but no investment power.

(6) Includes 30,749 shares held in Mr. Liddell's individual retirement account, 482 shares held in Lake Shore Bancorp's Employee Stock Ownership Plan over which Mr. Liddell has sole voting power and no investment power and 11,425 shares of unvested restricted stock over which Mr. Liddell has sole voting power but no investment power.

(7) Includes 22,088 shares held in Mr. McGrath's individual retirement account and 5,327 shares of unvested restricted stock over which Mr. McGrath has sole voting power but no investment power.

(8) Includes 6,676 shares of unvested restricted stock over which Mr. Mehltretter has sole voting power but no investment power.

(9) Includes 1,800 shares held in Mr. Passafaro's individual retirement account and 6,279 shares of unvested restricted stock over which Mr. Passafaro has sole voting power but no investment power.

(10) Includes 1,305 shares held as custodian for his grandchildren and 2,235 shares of unvested restricted stock over which Mr. Sanvidge has sole voting power but no investment power.

(11) Includes 23,500 shares held in Ms. Segarra's individual retirement account and 749 shares of unvested restricted stock over which Ms. Segarra has sole voting power but no investment power.

(12) Includes 4,787 shares held in Lake Shore Bancorp's Employee Stock Ownership Plan over which Mr. Werdein has sole voting power and no investment power and 5,548 shares of unvested restricted stock over which Mr. Werdein has sole voting power but no investment power.

(13) Includes 5,534 shares of common stock allocated to the accounts of executive officers under the Lake Shore Bancorp, Inc. Employee Stock Ownership Plan (the "ESOP") and excludes the remaining 154,199, or 2.7% of the shares of common stock outstanding, owned by the ESOP for the benefit of employees of Lake Shore Savings Bank. Under the terms of the ESOP, shares of common stock in the ESOP are voted by the ESOP trustees in a manner proportionate to the voting directions of the allocated shares received by the ESOP participants, subject to the fiduciary duties of the trustees.

## PROPOSAL ONE: ELECTION OF DIRECTORS

Our charter provides that we must have between five and fifteen directors. The Board of Directors is currently comprised of eight members, and is divided into three classes. Our directors generally serve staggered three-year terms such that usually only one class (approximately one-third of the directors) is elected each year.

Upon the recommendation of the Nominating and Corporate Governance Committee, our Board of Directors has nominated the three individuals listed in the table below for election as directors at the Annual Meeting. If you elect the nominees, they will hold office for the term set forth opposite their names or until their successors have been elected.

We know of no reason why any nominee may be unable to serve as a director. If any nominee is unable to serve, your proxy may be voted for another nominee proposed by the Board of Directors.

The table below sets forth certain information regarding the composition of the Board of Directors and Director Nominees, including the terms of office of Board members.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" EACH NOMINEE**.

### Composition of Director Nominees and Directors Continuing in Office

| Name | Age[(1)] | Current Term Expires | Class | Position(s) Held With Lake Shore Bancorp | Director Since |
|---|---|---|---|---|---|
| **Director Nominees** | | | | | |
| Kevin M. Sanvidge | 70 | 2025 | Two | Chairman of the Board | 2012 |
| Sharon E. Brautigam [(2)] | 68 | 2025 | Two | Vice Chairperson of the Board | 2004 |
| Ann M. Segarra | 58 | 2025 | Two | Director | 2023 |
| **Directors Continuing in Office** | | | | | |
| John P. McGrath | 70 | 2027 | One | Director | 2019 |
| Ronald J. Passafaro | 64 | 2027 | One | Director | 2019 |
| Kim C. Liddell | 64 | 2027 | One | President, Chief Executive Officer, and Director | 2023 |
| Michelle M. DeBergalis | 58 | 2026 | Three | Director | 2022 |
| Jack L. Mehltretter | 66 | 2026 | Three | Director | 2016 |

(1) As of March 24, 2025.

(2) Includes service as a director of Lake Shore Savings and Loan Association. In April 2006, the Bank converted from a New York-chartered savings and loan association to a federal savings bank, in connection with the Company's initial public offering and organization as a savings and loan holding company, which resulted in the name change of the Bank to Lake Shore Savings Bank.

# INFORMATION ABOUT OUR BOARD OF DIRECTORS

## Business Experience of Directors

The principal occupation during the past five years of each director nominee and directors continuing in office as well as other relevant experience is set forth below. All director nominees and directors continuing in office have held their present positions for five years unless otherwise stated.

## Director Nominees

**Kevin M. Sanvidge, *Chairman of the Board***
*Board Committees:* Loan, Compensation

Mr. Sanvidge has been the Chairman of the Board of Directors for Lake Shore, MHC, Lake Shore Bancorp, Inc., and Lake Shore Savings Bank since the 2020 Annual Shareholders' Meeting. He previously served as the Vice Chairman of the Board beginning in 2018. Mr. Sanvidge is retired from his position as Chief Executive Officer and Administrative Director of the Chautauqua County Industrial Development Agency ("IDA"), a position he held from June 2014 until December 2017.

He was previously the Executive Vice President of Administration and Supply Chain at Cliffstar Corporation in Dunkirk, New York, a private label juice and beverage manufacturer, a position he held from 2006 until 2012. Mr. Sanvidge began his tenure at Cliffstar Corporation in 1999 as Vice President of Human Resources and was promoted to Senior Vice President of Human Resources and Administration in 2003.

As Chief Executive Officer and Administrative Director of the Chautauqua County IDA, Mr. Sanvidge was responsible for facilitating development within Chautauqua County by attracting new businesses while promoting the retention and expansion of existing business, with assistance in the form of tax abatements, low interest loans or bond financing to enhance opportunities for job creation and retention.

The Board of Directors believes that Mr. Sanvidge's business and finance experience makes him qualified to serve as Chairman of the Board and a director of the Company.

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**Sharon E. Brautigam, *Vice Chairperson of the Board***
*Board Committees:* Nominating & Corporate Governance *(Chair)*, Compensation

Ms. Brautigam was a partner in the law firm of Brautigam & Brautigam, LLP in Fredonia, New York, from 1986 until 2016, where she concentrated her practice in the areas of real estate transactions, estates and trusts, elder law and small business formation and general advice. She was of counsel to Brautigam & Brautigam, LLP until May 2023 when she retired from the practice.

During her 40 years as an attorney, Ms. Brautigam represented borrowers as their attorney in connection with residential real estate purchases and mortgage refinancing. She has also represented a number of clients in connection with commercial mortgage financing and provided ongoing advice and counsel to numerous local small business owners.

She has the legal training and skills to analyze and help ensure compliance with the various laws and regulations to which the Company is subject.

The Board of Directors believes that Ms. Brautigam's legal expertise makes her qualified to serve as a director of the Company.

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**Ann M. Segarra**
*Board Committees:* Audit *(Chair),* Enterprise Risk

Ms. Segarra joined the Board of Directors for Lake Shore, MHC, Lake Shore Bancorp, Inc., and Lake Shore Savings Bank in October 2023. Since May 2019, Ms. Segarra has been a Unit Business Officer, College of Arts and Sciences for the University At Buffalo acting as a strategic partner and administrator. She is a member of the Dean's Senior Leadership Team and works directly with Central Administration Finance leadership.

Ms. Segarra brings more than 35 years of financial services experience to the Lake Shore Bancorp Board of Directors, including 28 years at Key Bank (as well as predecessor First Niagara Bank and its related subsidiaries), where she worked in various roles including Director of Internal Audit; Vice President of Finance and Investor Relations; Senior Vice President and Corporate Controller; Senior Vice President of Corporate Finance; Senior Vice President and Business Unit CFO of Tech Governance and Financial Performance; and Senior Vice President - Merger and Integration Director. She is an inactive Certified Public Accountant and is a past member of both the American Institute of CPAs and the New York State Society of CPAs.

Ms. Segarra is the "financial expert" on the Audit committee. The Board of Directors believes that Ms. Segarra's experience in financial reporting and analysis, internal control, audit, and finance makes her qualified to serve as a director of the Company.

## Directors Continuing in Office

**Kim C. Liddell,** ***President and Chief Executive Officer***
*Board Committees:* Loan (*Chair*)

Mr. Liddell became President, Chief Executive Officer, and Director of Lake Shore, MHC, Lake Shore Bancorp and Lake Shore Savings Bank in April 2023. Previously, Mr. Liddell served as Chairman and Director of BV Financial, Inc. and Bay Vanguard Bank, headquartered in Baltimore, Maryland, from 2020 to 2022 and Director until 2023. Mr. Liddell sat on the Board of Directors of the Federal Home Loan Bank of Atlanta from 2015 to 2023, where he served during his tenure as the Chairman of the Finance Committee, and member of the Credit and Member Services and Housing Committees. Additionally, Mr. Liddell serviced as Chairman, President, and Chief Executive Officer of 1880 Bank and Delmarva Bancshares, Inc. from 2010 until its sale in 2020.

The Board of Directors believes that Mr. Liddell's experience in banking and management makes him qualified to serve as a director of the Company.

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**John P. McGrath**
*Board Committees:* Audit, Enterprise Risk, Loan

Mr. McGrath retired as the Assistant Treasurer of Moog, Inc., a worldwide designer, manufacturer and systems integrator of high performance precision motion and fluid controls and controls systems for a broad range of applications in aerospace and defense and industrial markets in December 2019. He held this position since 2008.

Additionally, Mr. McGrath has nearly 30 years of experience in the banking industry, serving as a branch assistant manager, a branch operations manager and serving in the Treasury departments of Greater Buffalo Savings bank, First Niagara Financial Group, and Empire of America. Mr. McGrath has extensive experience in securities portfolio management, wholesale funding, asset and liability management, liquidity management and cash flow forecasting.

The Board of Directors believes Mr. McGrath's experience in treasury management and banking makes him qualified to serve as a director of the Company.

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**Ronald J. Passafaro**
*Board Committees:* Compensation *(Chair),* Nominating and Corporate Governance, Loan

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Mr. Passafaro is currently a Director of ThermoLift Solutions, LLC, a Novi, Michigan headquartered startup dedicated to the development and commercialization of thermally driven heat pumps for HVAC markets, which he joined in June 2023. Mr. Passafaro retired in 2021 as the President, CEO and Chairman of the Board of ECR International, a division of BDR Thermea Group, a position he held since 2015. BDR Thermea, headquartered in the Netherlands, is a global leader providing innovative heating and hot water systems and services for residential and commercial applications marketed in over 100 countries.

Mr. Passafaro has 30 years of experience in the HVAC industry and has significant experience and success in growing sales and developing innovative marketing campaigns, including brand development and management. He has created, developed and led multiple joint ventures, supplier relationships, contract manufacturing agreements and branding relationships. He has led or participated in multiple domestic and international mergers, acquisitions, divestitures and joint ventures. Mr. Passafaro also has experience in developing and adopting performance standards in conjunction with relationships developed with applicable federal and state regulators, including the United States Department of Energy, United States Environmental Protection Agency and the New York State Energy Research and Development Agency.

The Board of Directors believes that Mr. Passafaro's experience in strategic planning, business management, credit workout, shareholder valuation, joint ventures, mergers and acquisitions and development of regulatory requirements for the HVAC industry makes him qualified to serve as a director of the Company.

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**Michelle M. DeBergalis**
*Board Committees:* Compensation, Nominating & Corporate Governance

Ms. DeBergalis is Chairperson & CEO of American Realty Group, Inc., a full-service commercial real estate corporation which provides real estate advisory services including acquisition, disposition and leasing of commercial properties. Ms. DeBergalis serviced as President of American Realty Group, Inc. from 2006 to 2022.

Ms. DeBergalis is also the Director of Administrative Services for the University of Buffalo Educational Opportunity Center, a position she has held since February 2022. She oversees the business operational areas of finance, human resources, information technology, facilities, procurement, marketing, and communications for the Center. She also held the position of Chief Operating Officer at McGuire Development Company, LLC from 2013 to 2019. Her experience during the past five years includes strategic planning, financial, operational, real estate, marketing, human resources, branding, corporate growth and business development initiatives.

The Board of Directors believes that Ms. DeBergalis's public and private sector experience along with her commercial real estate, economic development and entrepreneurial expertise makes her qualified to serve as a director of the Company.

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**Jack L. Mehltretter**
*Board Committees:* Enterprise Risk *(Chair)*, Audit, Loan

Mr. Mehltretter retired from his position as Vice President of Information Technology for Gibraltar Industries, a leading manufacturer and distributer of building products for the industrial, infrastructure and residential markets, in 2022. He had held this position since January 2017. During 2016, Mr. Mehltretter intermittently provided consulting services as a principal to Nextgen Technology Advisors LLC, a consulting firm established in Hamburg, New York, that focuses on creating business value from information technology.

He was formerly the Global Vice President of Information Technology for New Era Cap Co., an international headwear and apparel company with operations in over 20 regional locations serving global markets, a position he held from 2007 to 2016.

Mr. Mehltretter has acquired significant business management, strategic planning, and global relationship skills while holding several technology leadership roles during his 34 years of business experience. His international business experience includes doing business in more than 15 different countries.

The Board of Directors believes that Mr. Mehltretter's experience in information technology, strategic planning and business management makes him qualified to serve as a director of the Company.

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## Board Responsibilities

The Board of Directors oversees our business and monitors the performance of our management. In accordance with our corporate governance guidelines, the Board of Directors does not involve itself in our day-to-day operations; our executive officers and management oversee our day-to-day operations. Our directors fulfill their duties and responsibilities by attending regular meetings of the Board of Directors and its committees, and also through considerable contact via telephone, e-mail and other communications with the Chairman and others regarding matters of concern and interest to us. Our directors also discuss business and other matters with the Chairman and other key executives.

## Meetings of the Board of Directors

The Board of Directors held a total of twelve regular meetings and two special meetings during 2024. Each incumbent director attended at least 75% of the meetings of the Board of Directors held during the time in which he or she served as director, plus meetings of committees on which that particular director served during this period.

It is our policy that all directors should attend the annual meeting of shareholders. In accordance with such policy, all directors attended the 2024 Annual Meeting of Shareholders.

## COMPENSATION OF DIRECTORS

### Director Compensation

***Director Compensation Table.*** The following table sets forth information regarding compensation earned by our non-employee directors during the 2024 fiscal year.

| Name | Fees Earned or Paid in Cash ($) (1) | Stock Awards ($) (2)(4) | Option Awards ($) (3)(4) | Non-qualified Deferred Comp-ensation Earnings ($) | All Other Compensation ($) (5) | Total ($) |
|---|---|---|---|---|---|---|
| Sharon E. Brautigam | 38,800 | 7,814 | 5,790 | - | - | 52,404 |
| Michelle M. DeBergalis | 30,800 | 6,179 | - | - | - | 36,979 |
| John P. McGrath | 42,800 | 49,847 | - | - | - | 92,647 |
| Jack L. Mehltretter | 47,800 | 63,434 | 16,825 | - | - | 128,059 |
| Ronald J. Passafaro | 36,800 | 61,019 | - | - | - | 97,819 |
| Kevin M. Sanvidge | 67,300 | 12,721 | 5,790 | - | - | 85,811 |
| Ann M. Segarra | 39,800 | 1,400 | - | - | - | 41,200 |

(1) Includes retainer payments and committee and/or chairmanship fees earned during the fiscal year.

(2) This column shows the grant date fair value of restricted stock awards computed in accordance with stock-based compensation accounting rules (Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 718). For more information concerning the assumptions used for these calculations, refer to Note 12 of the Notes to the Consolidated Financial Statements included in the 2024 Annual Report on Form 10-K filed with the SEC. The restricted stock awards are paid in lieu of cash director fees, and in certain cases, granted to recognize tenure milestones.

(3) This column shows the grant date fair value of stock options computed in accordance with stock-based compensation accounting rules (FASB ASC Topic 718). For more information concerning the assumptions used for these calculations, refer to Note 12 of the Notes to the Consolidated Financial Statements included in the 2024 Annual Report on Form 10-K filed with the SEC. The awards were granted as long-term compensation to directors in order to align their interests with those of shareholders.

(4) The aggregate number of outstanding restricted stock awards and option awards as of December 31, 2024 was as follows:

| Name | Unvested Stock Awards | Options Exercisable | Options Unexercisable |
|---|---|---|---|
| Sharon E. Brautigam | 731 | — | 1,897 |
| Michelle M. DeBergalis | 578 | — | — |
| John P. McGrath | 4,663 | — | — |
| Jack L. Mehltretter | 5,934 | — | 5,512 |
| Ronald J. Passafaro | 5,708 | — | — |
| Kevin M. Sanvidge | 1,190 | 10,749 | 1,897 |
| Ann M. Segarra | 131 | — | — |

(5) No director received any perquisites or personal benefits that exceeded $10,000.

***2024 Director Compensation.*** We pay annual retainers only to the directors who are not employees of Lake Shore Savings Bank, Lake Shore Bancorp, Inc. or Lake Shore, MHC. We do not pay any meeting fees. For the year ended December 31, 2024, the non-employee directors of Lake Shore Savings Bank, Lake Shore Bancorp, Inc. and Lake Shore, MHC received the following retainers: (i) annual retainer of $24,800 ($57,300 for the Chairman), (ii) annual retainer of $5,000 for members of Audit and Enterprise Risk committees ($10,000 for the Chairperson), (iii) annual retainer of $3,000 for members of Nominating and Corporate Governance and Compensation committees ($6,000 for the Chairperson), and (iv) $3,000 for members of the Loan committee (no additional compensation for the Chairperson of the Loan committee). The Chairman of the Board does not earn fees for his service on Board committees, except for his service as Chairman of the Chairman's Compliance committee, where he earns an annual retainer of $10,000. The Chairman's Compliance Committee was dissolved at the end of 2024.

***Supplemental Benefit Plans for Non-Employee Directors.*** Lake Shore Savings Bank entered into a supplemental benefit plan in 2001, as amended most recently in 2015, with each of its then non-employee directors. This plan provides a benefit formula equal to a percentage of the participant's average pay, which is multiplied by number of years of service, not to exceed 20 years of service or 40% of average pay. The payment is guaranteed over a period of fifteen years beginning the month following termination of service or age 72, whichever comes first. To participate, a non-employee director must complete three years of service. Currently, each of the non-employee directors participates in the plan, with the exception of Ms. DeBergalis, Mr. McGrath, Mr. Passafaro, and Ms. Segarra.

***Equity Compensation.*** Pursuant to the terms of the Lake Shore Bancorp, Inc. 2025 Equity Incentive Plan, which was approved by our stockholders at a special meeting held on February 4, 2025, each non-employee director who was in the service of Lake Shore Bancorp, Inc. on February 5, 2025 was automatically granted on March 12, 2025 a number of restricted stock awards in a dollar amount equal to thirty percent (30%) of a non-employee director's cash fees earned in the prior fiscal year (the "Automatic Annual Grants"), and subsequent Automatic Annual Grants will automatically be granted to each non-employee director on each January 2nd, commencing on January 2, 2026. To encourage retention of non-employee directors, whose judgment and efforts we have depended on for the successful conduct of its business, it is our policy to grant stock options and restricted stock awards upon the appointment of a non-employee director to certain positions as follows: (i) a non-employee director appointed as Chairman of the Board or Vice Chairman of the Board will receive one time grants of 12,646 stock options and 5,951 restricted stock awards, subject to a five year vesting schedule, (ii) a non-employee director appointed as Committee Chair will receive one time grants of 10,749 stock options and 5,058 restricted stock awards, subject to a five year vesting schedule, (iii) a non-employee director that completes ten years of service will receive one time grants of 10,117 stock options and 4,761 restricted stock awards, subject to a five year vesting schedule, and (iv) a non-employee director that completes three years of service will receive one time grants of 8,220 stock options and 3,868 restricted stock awards, subject to a five year vesting schedule.

***Equity Plans.*** Our directors are eligible to participate in the Lake Shore Bancorp, Inc. 2006 Stock Option Plan, the Lake Shore Bancorp, Inc. 2012 Equity Incentive Plan, and the Lake Shore Bancorp, Inc. 2025 Equity Incentive Plan (the "Equity Incentive Plans"). These benefit plans are discussed under the "*Information About Our Executive Officers: Compensation Plans - 2006 Stock Option Plan,*" "*Information About Our Executive Officers: Compensation Plans - 2012 Equity Incentive Plan,"* and "*Information About Our Executive Officers: Compensation Plans - 2025 Equity Incentive Plan"* sections elsewhere in this proxy statement.

## CORPORATE GOVERNANCE

Our Board of Directors has adopted Corporate Governance Guidelines that contain a number of corporate governance initiatives designed to comply with NASDAQ corporate governance listing standards, the Sarbanes-Oxley Act of 2002 and the rules and regulations of the SEC. We have also adopted charters for the Audit Committee, the Compensation Committee and the Nominating and Corporate Governance Committee in order to implement these rules and standards. Current versions of the Audit, Compensation and Nominating and Corporate Governance Committee charters are available on our website, www.lakeshoresavings.com under "About Us", "Investor Relations" - "Corporate Overview" - Governance Documents" section. The information set forth on our website shall not be deemed filed with, and is not incorporated by reference into, this proxy statement or any of our other filings under the Securities Act of 1933, as amended, or the Exchange Act of 1934, as amended, except to the extent that we specifically so provide.

### Board of Directors Independence

Annually, the Board of Directors determines director independence as defined by NASDAQ listing rule 5605(a)(2). The annual review includes reviewing the relationships that each director, his or her immediate family members and his or her related affiliates had with the Company. In making its determination as to the independence of its directors in accordance with NASDAQ listing standards rules, a review of the outstanding loans that directors Brautigam and Sanvidge and their family members or affiliates had with the Bank was completed, and it was noted that the loans were made in the ordinary course of business with substantially the same terms prevailing for loans made to others unrelated to the Bank and did not involve more than the normal risk of collectability or present other unfavorable features. The Board of Directors made the determination that the above-named directors remained independent. Mr. Kim C. Liddell was not an independent director because he was the President and Chief Executive Officer of the Company in 2024.

The table below notes directors and committee assignments in 2024. As noted in the table below, the Board of Directors is comprised of a majority of directors who qualify as independent according to NASDAQ Stock Market Rules.

| **Committee Name** | Brautigam | DeBergalis | Liddell | McGrath | Mehltretter | Passafaro | Segarra | Sanvidge |
|---|---|---|---|---|---|---|---|---|
| Audit | | | | **X** | **X** | | **C** | |
| Enterprise Risk | | | | **X** | **C** | | **X** | |
| Compensation | **X** | **X** | | | | **C** | | **X** |
| Nominating & Corporate Governance | **C** | **X** | | | | **X** | | |
| Chairman's Compliance(1) | **X** | | | **X** | **X** | | | **C** |
| Loan | | | **C** | **X** | **X** | **X** | | **X** |
| Independence Status | **X** | **X** | | **X** | **X** | **X** | **X** | **X** |

"**C**" represents Chairperson and "**X**" represents Member.

(1) The Chairman's Compliance Committee was dissolved at the end of 2024.

## Leadership Structure of the Board of Directors

The positions of Chief Executive Officer of the Company and the Chairman of the Board of Directors are expected to continue to be held by two different individuals. The Chairman of the Board is an independent, non-employee director. We believe that this structure provides strength to the Company by giving the Chief Executive Officer a respected voice to our Board, while at the same time giving leadership of the Board to an independent person who, together with the other Directors, provides active oversight of management and its implementation of the strategic plans of the Board. Each of our Directors serves on one or more of the committees of the Board and actively and regularly participates in the various functions of these committees. The committee structure enables the duties of the Board to be divided among the Directors. This division of duties allows each of the Directors to concentrate his or her energies in a focused way on a narrower area of Board responsibility and helps insure that adequate time is being given to the many oversight responsibilities of the Board. We believe that the size of our Board provides a sufficient number of Directors to serve on each of the Board's committees, but is not so large as to be cumbersome or excessively expensive to the Company.

## Committees of the Board of Directors

Our Board of Directors has established the following committees:

***Audit Committee.*** The Audit Committee oversees and monitors the integrity of the Company's financial reporting process and systems of internal control regarding finance, accounting and regulatory compliance. The Audit Committee retains, oversees and monitors the independence and performance of the Company's independent registered public accounting firm. The Audit Committee also oversees and monitors the independence and performance of the internal audit department and acts as an avenue of communication between the independent registered public accounting firm, management, the internal audit department and the Board of Directors. The Audit Committee meets with the external auditors to review quarterly and annual SEC filings, the results of the annual audit and other related matters.

Our Board of Directors determined that Ms. Segarra qualified as an "audit committee financial expert" as defined in Item 407(d)(5) of Regulation S-K. The Audit Committee chose Ms. Segarra to serve as the "financial expert" on behalf of the Company for 2024. The Audit Committee met nine times during 2024.

***Compensation Committee.*** The Compensation Committee evaluates the performance of our management team and recommends compensation based upon that performance. It oversees executive compensation and director compensation by approving salary increases and reviewing general personnel matters such as named executive officer performance evaluations. The Compensation Committee annually reviews and makes recommendations to the Board of Directors with respect to the compensation of directors and named executive officers. It is also responsible for approving, evaluating and administering compensation structure, policies and programs, which includes benefit plans, such as the Company's 401(k) and ESOP plan, as well as incentive plans and stock compensation plans. The Compensation Committee did not engage any compensation consultant in 2024.

The Compensation Committee takes into account numerous factors when determining a recommendation for the salaries and incentive goals of named executive officers. In addition to information obtained from the American Bankers Compensation and Benefits survey and information provided from other relevant third party sources, the Compensation Committee also obtains the Chief Executive Officer’s recommendation for proposed salary increases and incentive goals for the named executive officers (other than the President and Chief Executive Officer). The results of the non-binding shareholder vote to approve the compensation of the Company’s named executive officers from the most recent shareholders’ meeting are also reviewed by the Compensation Committee. The Compensation Committee considers the Company's performance in the prior year, the Company's strategic plans and goals for the future, and position scope (for positions other than the President and Chief Executive Officer) as part of its decision process to decide upon a recommendation for salaries and incentive goals for the named executive officers.

The Compensation Committee makes recommendations on compensation for named executive officers and directors which is subject to full Board of Director approval. The Compensation Committee met five times during 2024.

***Nominating and Corporate Governance Committee.*** The Nominating and Corporate Governance Committee recommends the nomination of directors to the full Board of Directors to fill the terms for the upcoming year or to fill vacancies during a term. The Nominating and Corporate Governance Committee considers recommendations from shareholders if submitted in a timely manner in accordance with the procedures established by the Committee and applies the same criteria to all persons being considered. The Nominating and Corporate Governance Committee also assists the Board of Directors in monitoring a process to assess Board of Directors’ effectiveness and in developing and implementing our corporate governance guidelines and reviewing and approving all transactions with affiliated parties. The Nominating and Corporate Governance Committee monitors our regulatory compliance and our compliance with our corporate governance guidelines. In addition, the Nominating and Corporate Governance Committee recommends to the full Board the assignment of Directors to the committees of the Board, which responsibility includes a determination of the independence of individual directors according to the NASDAQ and SEC rules. The Nominating and Corporate Governance Committee also oversees periodic evaluations of individual Directors and of the full Board of Directors, to insure their effectiveness. Lastly, the Nominating and Governance Committee assists the Board of Directors in selecting a President and Chief Executive Officer and in selecting a chairperson for the Board of Directors by overseeing the succession process for these positions. The Committee also ensures that an emergency succession plan for the Chief Executive Officer is in place and is annually updated.

The Nominating and Corporate Governance Committee met five times during 2024.

The Nominating and Corporate Governance Committee has adopted procedures for the submission of recommendations for director nominees by our shareholders. If a determination is made that an additional candidate is needed for the Board of Directors, the Nominating and Corporate Governance Committee will consider candidates submitted by our shareholders. Shareholders can submit the names of qualified candidates for director by writing to the chairperson of the Nominating and Corporate Governance Committee at 31 East Fourth Street, Dunkirk, New York 14048. The chairperson must receive a submission not less than 180 days prior to the anniversary date of our proxy materials for the preceding year’s annual meeting. The submission must include the following information:

- a statement that the writer is a shareholder and is proposing a candidate for consideration by the Nominating and Corporate Governance Committee;

- the name and address of the shareholder as they appear on our shareholder records, and number of shares of our common stock that are owned beneficially by such shareholder (if the shareholder is not a holder of record, appropriate evidence of the shareholder's ownership will be required);

- the name, address and contact information for the candidate, and the number of shares of our common stock that are owned by the candidate (if the candidate is not a holder of record, appropriate evidence of the candidate's ownership should be provided);

- a statement of the candidate's business and educational experience;

- such other information regarding the candidate as would be required to be included in the proxy statement pursuant to Regulation 14A of the Securities Exchange Act of 1934;

- a statement detailing any relationship between the candidate and any customer, supplier or competitor of Lake Shore Bancorp, Inc. or its affiliates;

- detailed information about any relationship or understanding between the proposing shareholder and the candidate; and

- a statement from the candidate that the candidate is willing to be considered and willing to serve as a director if nominated and elected.

A nomination submitted by a shareholder for presentation by the shareholder at an annual meeting of shareholders must comply with the procedural and informational requirements described in our bylaws.

Shareholder nominees are analyzed by the Committee in the same manner as nominees that are identified by the Committee. We do not pay a fee to any third party to identify or evaluate nominees. As of April 11, 2025, the Committee had not received any shareholder recommendations for nominees in connection with the Annual Meeting.

### Consideration of Director Candidates

It is the policy of the Nominating and Corporate Governance Committee to select individuals as director nominees with the goal of creating a balance of knowledge, experience and interest on the Board. The Committee evaluates candidates for their character, judgment, business experience and acumen. The Nominating and Corporate Governance Committee considers the following skills and characteristics when deciding which individuals to nominate for election as director:

- **Skills and Experience**: The Nominating and Corporate Governance Committee recognizes the necessity for directors to bring a variety of skills into the boardroom, including financial expertise, business ownership and development expertise, experience or expertise in dealing with laws and regulations, experience connected with residential and commercial real estate development and lending, and knowledge and experience with cybersecurity risk management and technology relevant to the banking industry. Therefore, the Nominating and Corporate Governance Committee looks for directors who can provide a necessary range of these skills to the Board.

- **Community Involvement**: The Nominating and Corporate Governance Committee recognizes that Lake Shore Savings is a community-based, locally oriented bank with a long history of community involvement. The Nominating and Corporate Governance Committee considers it crucial that a director be involved in the local community through their occupations and public service as this local knowledge will insure that directors understand the needs of individuals and businesses in the communities served by Lake Shore Savings. Therefore the Nominating and Corporate Governance Committee considers the community contacts and community involvement of any candidate for director.

- **Independence**: The Board of Directors can be composed of both independent directors (as defined by NASDAQ rules) and non-independent directors. The composition of the Board must be in compliance with NASDAQ rules and it is the Company's policy that a majority of its directors qualify as independent under NASDAQ rules. Therefore, the Nominating and Corporate Governance Committee carefully assesses the independence of all candidates for director.

- **Age**: The Nominating and Corporate Governance Committee would like directors to be varied in age, so that each director can bring the unique perspective of his or her generation. A multi-generational perspective will help insure that Lake Shore Savings remains a viable banking institution both now and for the future. However, age alone is not a determinative factor in deciding whether to nominate a person as a director.

- **Diversity**: The Nominating and Corporate Governance Committee recognizes the value of having gender, racial, ethnic and similar types of diversity represented by its directors, as this diversity will assist Lake Shore Savings in understanding and meeting the needs of all segments of the communities it serves. The diversity any candidate could bring to the Board is considered a positive attribute, but would not be the determinative factor in deciding whether to nominate a person as a director.

- All director nominees will have multiple skills, attributes and qualifications which would contribute to the strength and competency of the Board.

The Nominating and Corporate Governance Committee does not assign specific weights to particular criteria and no particular criterion is necessarily applicable to all prospective director candidates. For a discussion of the specific backgrounds and qualifications of our current directors and director nominees, see *"Information about our Board of Directors – Business Experience of Directors."*

### Risk Oversight by the Board of Directors

The Board of Directors is responsible for the oversight of risks that could have a material effect on the Company. This oversight is conducted primarily by the Enterprise Risk Committee, with the assistance of other committees of the Board. The Enterprise Risk Committee oversees and monitors the Bank's enterprise risk management program. A key role of the Enterprise Risk Committee is to coordinate with Management, Board Committees and the Board of Directors to ensure all parties accountable for risk understand the risks to the institution and confirm that risks are identified, measured, monitored and controlled. The Board of Directors satisfies this responsibility through full reports by each committee chairperson regarding the committee's considerations and actions, as well as through regular reports directly from members of management who are responsible for oversight of particular risks within the Company, including credit, interest rate, liquidity, price, strategic, reputational, operational, information technology (including cybersecurity), and compliance.

### Code of Conduct and Ethics

We have adopted a Code of Conduct and Ethics that is applicable to all officers, directors and employees of Lake Shore Bancorp and its affiliates, including our principal executive officer and principal financial and accounting officer. A copy of the Code of Conduct and Ethics is available at our website, www.lakeshoresavings.com under "About Us", "Investor Relations" – "Corporate Overview" - "Governance Documents" section. The information set forth on our website shall not be deemed filed with, and is not incorporated by reference into, this proxy statement or any of our other filings under the Securities Act of 1933, as amended, or the Exchange Act of 1934, as amended, except to the extent that we specifically so provide.

### Anti-Hedging and Anti-Pledging Policy

The Company's Insider Trading Policy prohibits its directors, officers or other employees from engaging in short sales of Company stock, as well as transactions in any puts, calls or other derivative securities on Company stock in any organized market, or "hedging". The Insider Trading Policy also prohibits employees, officers and directors of the Company from pledging its Company stock or depositing any Company stock in a margin account.

### Insider Trading Arrangements and Policy

The Company has adopted an Insider Trading Policy governing the purchase, sale, and/or other dispositions of our securities by our directors, officers and employees as well as by the Company itself that we believe is reasonably designed to promote compliance with insider trading laws, rules and regulations, and the NASDAQ exchange listing standards. A copy of our Insider Trading Policy was filed as Exhibit 19 to our Annual Report on Form 10-K for the year ended December 31, 2024.

### Shareholder Communications with the Board of Directors

Shareholders may contact our Board of Directors, our independent directors as a group, or an individual director by contacting Kim C. Liddell, Investor Relations, Lake Shore Bancorp, Inc., 31 East Fourth Street, Dunkirk, New York 14048. All comments will be forwarded directly to the Board of Directors, the independent directors as a group, or the individual director, as applicable.

## INFORMATION ABOUT OUR EXECUTIVE OFFICERS

### General

Our executive officers serve at the discretion of the Board of Directors. The name, age, length of service and principal position of each of our executive officers is set forth in the table below.

| Name | Age[(1)] | With Lake Shore Since | Position(s) Held With Lake Shore Bancorp, Inc. |
|---|---|---|---|
| Kim C. Liddell | 64 | 2023 | President, Chief Executive Officer, and Director |
| Jeffrey M. Werdein | 58 | 2014 | Executive Vice President - Commercial Division |
| Taylor M. Gilden | 34 | 2023 | Chief Financial Officer and Treasurer |

(1) As of March 24, 2025.

### Business Experience of Executive Officers

The business experience for each of our executive officers who are not directors is set forth below. For a description of Mr. Liddell's business experience, see the above "*Information about our Board of Directors - Business Experience of Directors*."

***Jeffrey M. Werdein*** is the Executive Vice President for the Commercial Division of Lake Shore Bancorp, and Lake Shore Savings Bank. He was appointed Executive Vice President in August 2014 after serving as the Senior Vice President responsible for business development in the commercial real estate and small/middle business segments at Evans Bank since 1999. Mr. Werdein served as Interim Principal Executive Officer of the Company from March 10, 2023 until April 19, 2023. Mr. Werdein has over 30 years of commercial banking experience, including prior positions with Citibank and Chase Manhattan Bank. Mr. Werdein has a Bachelor of Science degree and a Masters of Business Administration degree with a focus in Business and Financial Institutions and Markets from the State University of New York at Buffalo. Mr. Werdein is a graduate of the American Bankers Association Stonier National Graduate School of Banking.

***Taylor M. Gilden*** is the Chief Financial Officer and Treasurer of Lake Shore, MHC, Lake Shore Bancorp, and Lake Shore Savings Bank. He was appointed Chief Financial Officer and Treasurer in August 2023 after serving as the Chief Strategy Officer since June 2023. Mr. Gilden served as Senior Vice President and Controller of FVCbank in Fairfax, Virginia from July 2022 until May 2023. He was formerly the Vice President of Finance at BayVanguard Bank, Baltimore, Maryland (and predecessor 1880 Bank) from 2018 until 2022. Mr. Gilden worked for Deloitte and Touche LLP's Audit and Assurance practice from 2013 to 2018 with a focus in the financial services industry. He graduated from American University with a Bachelor of Science in Accounting and Master of Science in Finance.

### Compensation Plans and Agreements

***Employment Agreements.*** Lake Shore Savings Bank entered into an employment agreement with Mr. Liddell on December 16, 2024 and entered into an employment agreement with Mr. Gilden on March 11, 2025 (together, the "Employment Agreements"). The Employment Agreements are substantially similar, except Mr. Liddell's Employment Agreement has an initial term of three years and the initial term of Mr. Gilden's agreement ends on December 16, 2027. Commencing on December 16, 2025 and continuing each anniversary thereafter, the term of the Employment Agreements will extend for an additional year, so that the term again becomes three years. However, at least ninety (90) days before the anniversary date of the agreement, the non-employee members of the board of directors must conduct a comprehensive performance evaluation of Mr. Liddell and review Mr. Liddell's performance evaluation of Mr. Gilden and affirmatively approve any extension of the agreement for an additional year or determine not to extend the term of the agreement. If the Board of Directors determines not to extend the term, the term of the agreement will expire at the end of the current term. If a change in control occurs during the term of the Employment Agreements, the term of the agreement will automatically renew for no less than thirty-six (36) months from the effective date of the change in control.

The Employment Agreements provide that Messrs. Liddell and Gilden will receive an annual base salary of $550,000 and $265,000 during the term of the Employment Agreement and the base salary may be increased. Messrs. Liddell and Gilden's current base salaries are $605,000 and $265,000, respectively. In addition to base salary, Messrs. Liddell and Gilden will be eligible to receive an annual performance-based cash bonus, depending on the achievement of certain performance metrics, and, at the discretion of the compensation committee of the board of directors, Messrs. Liddell and Gilden will be eligible to receive long-term incentive compensation. Mr. Liddell will also be entitled to an annual executive perquisites allotment as approved by the Board of Directors of Lake Shore Savings Bank.

In the event Mr. Liddell or Mr. Gilden voluntarily terminates employment without "good reason," (as defined in the Employment Agreements) the executive will be entitled to receive the sum of his (i) unpaid base salary, (ii) unpaid expense reimbursements, (iii) unused accrued paid time off and (iv) earned but unpaid incentive compensation (together, the "Accrued Benefits").

In the event Mr. Liddell or Mr. Gilden's employment involuntarily terminates for a reason other than cause or in the event of his resignation for "good reason," the executive will receive a lump sum severance payment in an amount equal to the Accrued Benefits plus one times base salary and the average annual incentive cash compensation awarded with respect to the three most recent fiscal years ending before the year of termination provided that the executive timely executes a release agreement. In addition, the executive will receive a cash lump sum payment in an amount equal to Lake Shore Savings Bank's cost of otherwise continuing life, medical and dental coverage for the executive for twelve (12) months.

In the event Mr. Liddell or Mr. Gilden's employment involuntarily terminates for a reason other than cause or in the event of his resignation for "good reason," in either event within three months before or twelve (12) months following a change in control, the executive will receive a severance payment, paid in a single lump sum, equal to the executive's Accrued Benefits plus three times the sum of (i) his base salary in effect as of the date of termination or immediately before the change in control, whichever is higher, and (ii) the highest annual cash bonus (the average annual cash bonus for Mr. Gilden) earned with respect to the three most recent fiscal years ending before the year of the change in control. In addition, the executive will receive a cash lump sum payment in an amount equal to the cost of continuing life, medical and dental coverage for the executive for thirty-six (36) months. The executive will also be entitled to receive a gross-up payment for any excise taxes imposed under Sections 280G and 4999 of the Internal Revenue Code.

Upon termination of Mr. Liddell or Mr. Gilden's employment (other than following a change in control), the executive will be subject to certain restrictions on his ability to compete or to solicit business or employees of the Bank and the Company for a period of one year. The Employment Agreements also include provisions protecting the Company's and the Bank's confidential business information.

***Annual Incentive Plan.*** We provide performance-based bonuses to our named executive officers pursuant to the Annual Incentive Plan, which is designed to link awards to our strategic and operating objectives. The goal of the plan is to have long-term viability and to be attractive to new hires and help retain current employees. The plan measures business plan goals and objectives and clearly defines these for the calendar year for which the plan is in effect. For purposes of the annual bonus, each named executive officer is evaluated on several corporate performance measures which are established at the beginning of the year and relate to strategic business objectives for the ensuing year. The named executive officers, with the exception of the President and Chief Executive Officer, are also evaluated on individual performance measures that take into account individual responsibilities, in addition to the corporate performance measures. The Compensation Committee establishes the performance measures for each of the named executive officers. The President and Chief Executive Officer is not involved in decisions regarding his performance-based bonus. Decisions relating to the President and Chief Executive Officer's performance-based compensation are determined and recommended by the Compensation Committee. The Compensation Committee presents the performance measures to the Board of Directors for approval.

***Supplemental Executive Retirement Plans.*** Lake Shore Savings Bank entered into a supplemental executive retirement plan with Kim C. Liddell, President, CEO, and Director, of the Company and the Bank on December 16, 2024, which replaced the prior supplemental executive retirement plan that Lake Shore Savings Bank and Mr. Liddell entered into on July 16, 2024. Under the plan, if Mr. Liddell terminates employment on or after age 67, Lake Shore Savings Bank will pay Mr. Liddell the annual amount that is paid from Annuity Contracts (as defined in the plan), with such annual amount payable in 12 equal monthly installments for 15 years, and if the executive is living at the end of the 15 year payment period, such payments will continue for the remainder of Mr. Liddell's life. If Mr. Liddell terminates employment before age 67, Lake Shore Savings Bank will pay Mr. Liddell an amount equal to the amount that is paid from the Annuity Contracts, with such annual amount payable in twelve (12) equal monthly installments for fifteen (15) years, and if the executive is living at the end of the fifteen (15) year payment period, such payments will continue for the remainder of the executive's life. The plan also provides a benefit in the event of Mr. Liddell's disability, death, or upon the occurrence of a change in control followed by a qualifying termination of employment.

Lake Shore Savings Bank entered into a supplemental benefit plan with Jeffrey M. Werdein, Executive Vice President, Commercial Division, of the Company and the Bank. Under the supplemental benefit plan, Mr. Werdein is fully vested in an annual benefit, payable in monthly installments, and the annual benefit is equal to (i) 2% of the officer's average final pay (which is defined as the average pay over the two years prior to termination of service), multiplied by (ii) the officer's years of service (with a maximum percentage of 40% of average final pay). The benefit amount is payable over a period of fifteen years commencing at age 65, and in the event of a change of control, the executive is treated as having attained age 65 for purposes of benefit payments.

***Retention Agreement.*** In order to provide further incentive for Jeffrey M. Werdein, Executive Vice President Commercial Division of the Company and the Bank, to remain in the employ of Lake Shore Savings Bank, Lake Shore Savings entered into a retention agreement with Mr. Werdein on March 29, 2018. Under the agreement, Mr. Werdein will receive a total of $1.4 million provided that he remains continuously employed with Lake Shore Savings Bank through March 29, 2028, payable in three equal installments on March 29, 2028, January 2, 2029 and January 2, 2030. In the event Mr. Werdein's employment is terminated without cause, for good reason or due to death or disability prior to March 29, 2028, Mr. Werdein will receive the vested account balance as set forth in the agreement. If Mr. Werdein's employment is terminated within two years of a change of control and prior to March 29, 2028, Mr. Werdein may receive up to $1.4 million in a lump sum.

***Employee Stock Ownership Plan.*** This plan is a tax-qualified plan that covers substantially all employees who have at least one year of service with the Bank and have attained age 21. The Company loaned the Employee Stock Ownership Plan Trust sufficient funds to purchase 238,050 shares in connection with the Company's initial public stock offering.

Although contributions to the plan are discretionary, the Bank intends to contribute enough money each year to make the required principal and interest payments on the loan from the Company. This loan is for a term of 30 years and calls for annual payments of principal and interest. The plan pledges the shares it purchases as collateral for the loan and holds them in a suspense account.

The plan will not distribute the pledged shares right away. Instead, it will release a portion of the pledged shares annually. Assuming the plan repays its loan as scheduled over a 30-year term, we expect that 1/30th of the shares will be released annually in years 2006 through 2035. Although the repayment period of the loan is scheduled over a 30-year term, we may prepay a portion of the principal which would trigger the release of additional shares. The plan will allocate the shares released each year among the accounts of participants in proportion to their compensation for the year. Participants direct the voting of shares allocated to their accounts. Shares in the suspense account and allocated shares for which no voting instructions are received will be voted in a way that mirrors the votes which participants cast.

***401(k) Defined Contribution Plan.*** The Lake Shore Savings tax-qualified 401(k) defined contribution plan is maintained for employees who are employed on the first month following their initial date of employment and attained age 21. Eligible employees may make pre-tax contributions to the 401(k) Plan in the form of salary deferrals of up to 75% of their total annual 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 Bank makes a matching contribution equal to 40% of the eligible employee's salary deferral, up to 6% of such employee's compensation, once an employee is eligible to participate in the 401(k) plan. For the profit sharing component, the Bank makes a discretionary contribution, up to 5.1% of an eligible employee's salary, depending on years of service. Lastly, the Bank 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.

***2025 Equity Incentive Plan.*** The Lake Shore Bancorp, Inc. 2025 Equity Incentive Plan provides for the grant of stock options, restricted stock awards, and restricted stock units to its officers, employees, and directors. The 2025 Equity Incentive Plan is administered by the members of the Company's Compensation Committee and up to 300,000 shares of Company common stock are authorized for issuance pursuant to grants of stock options, restricted stock awards and restricted stock units. For employees, the sum of the grant date fair value of equity awards, including stock options, restricted stock and restricted stock units, may not exceed $500,000 for any calendar year. To encourage retention, the President and Chief Executive Officer, on completion of three years of service, will receive one time grants of 46,166 stock options and 29,750 restricted stock awards, subject to a five year vesting schedule. As of March 24, 2025, 272,803 shares remain available for grant under the 2025 Equity Incentive Plan.

***2012 Equity Incentive Plan.*** Equity awards can no longer be granted under the 2012 Equity Incentive Plan since the plan was adopted more than 10 years ago. Restricted stock awards and stock options previously granted under this plan remain outstanding and are subject to the terms and conditions of this plan.

***2006 Stock Option Plan.*** Stock options can no longer be granted under the Lake Shore Bancorp, Inc. 2006 Stock Option Plan since the plan was adopted more than 10 years ago. Stock options previously granted under this plan remain outstanding and are subject to the terms and conditions of this plan.

***Policies and Practices Related to the Grant of Stock Options.*** The Compensation Committee and the Board have a historical practice of not granting stock options to executive officers during closed quarterly trading windows as determined under the Company's insider trading policy. Consequently, we have not granted, and do not expect to grant, any stock options to any named executive officers within four business days preceding or one business after the filing with the SEC of any report on Forms 10-K, 10-Q or 8-K that discloses material non-public information. The Compensation Committee and the Board do not take material non-public information into account when determining the timing of equity awards and do not time the disclosure of material non-public information in order to impact the value of executive compensation. We did not grant any stock options to our executive officers, including the named executive officers, during the year ended December 31, 2024.

## PROPOSAL TWO: APPROVE, ON AN ADVISORY BASIS, A NON-BINDING RESOLUTION REGARDING THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS

Pursuant to Section 951 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), the proxy rules of the SEC were amended to require that not less frequently than once every three years, a proxy statement for an annual meeting of shareholders must include a separate resolution subject to a non-binding shareholder vote to approve the compensation of the Company's named executive officers disclosed in the proxy statement.

The executive officers named in the summary compensation table and disclosures set forth below under the *"Executive Officer Compensation"* section in this proxy statement and deemed to be "named executive officers" are Mr. Liddell, Mr. Werdein, and Mr. Gilden.

This proposal gives shareholders the ability to vote on the compensation of our named executive officers through the following resolution:

"Resolved, that the shareholders approve, on an advisory basis, the compensation of the named executive officers as disclosed in the *"Executive Officer Compensation"* section of the proxy statement."

The shareholder vote on this proposal is not binding on Lake Shore Bancorp, Inc. or the Board of Directors and cannot be construed as overruling any decision made by the Board of Directors. However, the Board of Directors of Lake Shore Bancorp, Inc. will review the voting results on the non-binding resolution and take them into consideration when making future decisions regarding executive compensation.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE NON-BINDING RESOLUTION TO APPROVE THE COMPENSATION OF OUR NAMED EXECUTIVE OFFICERS.**

## EXECUTIVE OFFICER COMPENSATION

The discussion provided below reflects the SEC's executive compensation reporting requirements for "smaller reporting companies."

### Summary Compensation Table

The following table provides the total compensation paid to or earned by the named executive officers for fiscal years ended December 31, 2024 and 2023. Each individual listed in the table below is referred to as a named executive officer or NEO.

| Name and Principal Position(s) | Year | Salary ($) | Bonus ($) | Stock Awards[4] ($) | Option Awards [5] ($) | Non-Equity Incentive Plan Compensation [6] ($) | All Other Compensation [7] ($) | Total ($) |
|---|---|---|---|---|---|---|---|---|
| Kim C. Liddell [1] | 2024 | 560,555 | - | 55,192 | - | 254,312 | 198,807 | 1,068,866 |
| President and Chief Executive Officer | 2023 | 370,178 | - | - | - | 110,404 | 87,675 | 568,257 |
| Jeffrey M. Werdein [2] | 2024 | 284,805 | - | 27,088 | - | 45,051 | 97,253 | 454,197 |
| Executive Vice President, Commercial Division | 2023 | 269,757 | - | - | - | 43,075 | 82,813 | 395,645 |
| Taylor M. Gilden [3] | 2024 | 262,596 | - | 44,652 | - | 100,525 | 25,956 | 433,729 |
| Chief Financial Officer and Treasurer | 2023 | 139,423 | - | - | - | 46,500 | 27,379 | 213,302 |

(1) Mr. Liddell was appointed President, Chief Executive Officer, and Director on April 19, 2023.

(2) Mr. Werdein also served as Interim Principal Executive Officer from March 10, 2023 through April 19, 2023, which is the date Mr. Liddell was appointed President, Chief Executive Officer, and Director.

(3) Mr. Gilden was appointed the Chief Strategy Officer on June 5, 2023 and on August 1, 2023, Mr. Gilden was appointed as the Chief Financial Officer and Treasurer.

(4) This column shows the grant date fair value of restricted stock awards computed in accordance with stock-based compensation accounting rules (FASB ASC Topic 718). For more information concerning the assumptions used for these calculations, please refer to Note 12 of the Notes to the Consolidated Financial Statements included in the 2024 Annual Report on Form 10-K filed with the SEC. For 2024, grants of restricted stock awards vest over four years. Refer to the *Outstanding Equity Awards at Fiscal Year End* table below for additional information regarding the grants of restricted stock awards.

(5) There were no awards of stock options to named executive officers during 2024 or 2023.

(6) Represents the non-equity incentive compensation paid to each named executive officer pursuant to the Annual Incentive Plan. The non-equity incentive compensation was paid based on performance measures established by the Compensation Committee. The target payout level range (as a percentage of base salary) for the Chief Executive Officer and other named executive officers was 10% - 45% and 10% - 37.5%, respectively. The actual payout, as a percentage of base salary earned, to Mr. Liddell, Mr. Werdein, and Mr. Gilden for 2024 was 45.4%, 15.8%, and 38.3%, respectively, of base salary.

(7) For 2024, the amounts in this column reflect what Lake Shore Savings Bank paid for, or reimbursed, the applicable named executive officer, as set forth in the following table:

| Name | Year | Employer Contribution to 401(k) Plan ($) | ESOP Contributions [a] ($) | Supplemental Executive Retirement Plan Tax Reimburse-ments ($) | Dividends On Unvested Stock Awards ($) | Life Insurance Premiums in excess of $50,000 ($) | Perquisites[b] ($) | Total ($) |
|---|---|---|---|---|---|---|---|---|
| Liddell | 2024 | 35,835 | 6,625 | 22,024 | 2,788 | 792 | 130,743 | 198,807 |
| Werdein | 2024 | 33,312 | 6,625 | 2,043 | 3,042 | 516 | 51,715 | 97,253 |
| Gilden | 2024 | 19,959 | 3,645 | — | 2,256 | 96 | — | 25,956 |

(a) Represents the value of the shares of common stock allocated to each named executive officer's ESOP account based on a fair market value of $13.74 per share, which was the closing price of the Company's common stock at December 31, 2024.

(b) We provide certain non-cash perquisites and personal benefits to each named executive officer. The non-cash perquisites and personal benefits for Mr. Liddell included $60,757 for housing and transportation, $44,186 for payment of taxes for fringe benefits, and $25,800 for country club dues. The non-cash perquisites and personal benefits for Mr. Werdein included a $12,462 car allowance, $25,103 for country club dues, and $14,150 payment of taxes for club dues.

## Outstanding Equity Awards at Fiscal Year End

The following table sets forth information regarding stock awards and stock options outstanding for each of our named executive officers at December 31, 2024.

| | Option Awards | | | | Stock Awards | | | |
|---|---|---|---|---|---|---|---|---|
| Name | Number of Securities Underlying Unexercised Options (#) Exercisable [(1)] | Number of Securities Underlying Unexercised Options (#) Unexercisable | Option Exercise Price ($) | Option Expiration Date | Number of Shares or Units of Stock That Have Not Vested (#) [(2)] | Market Value of Shares or Units of Stock That Have Not Vested ($) [(3)] | Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Vested (#) [(4)] | Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($) [(5)] |
| Kim C. Liddell | — | — | — | — | 5,163 | 70,940 | — | — |
| Jeffrey M. Werdein | 17,073 | — | 14.38 | 10/21/2026 | 2,534 | 34,817 | 3,100 | 42,594 |
| Taylor M. Gilden | — | — | — | — | 4,177 | 57,392 | — | — |

(1) Mr. Werdein's options were granted in 2016 and became 100% vested on October 21, 2021.

(2) The restricted stock awards granted to Messrs. Liddell, Werdein and Gilden have a vesting period of four years in which 25% of the shares granted vest each year starting on April 23, 2025.

(3) Market value is calculated on the basis of $13.74 per share, which was the closing sales price for our common stock on the NASDAQ Stock Market on December 31, 2024.

(4) Represents 3,100 unearned restricted stock units based on a three-year average percentage of delinquent loans to total loans, and if this performance metric is attained, Mr. Werdein's unearned awards vest in February 2025. These awards fully vested on February 28, 2025.

## PAY VERSUS PERFORMANCE

### Pay Versus Performance Table

The following table shows the total compensation for our NEOs for the past three fiscal years as set forth in the Summary Compensation Table above and the “compensation actually paid” to our principal executive officers (“PEOs”) and, on an average basis, our other NEOs, in each case, as determined under SEC rules, our total shareholder return (“TSR”) based on a fixed $100 initial investment, and our net income:

| | Summary Compensation Table Total for PEO | | | Compensation Actually Paid to PEO | | | Average Summary Compensation Table Total for Non-PEO NEOs | Average Compensation Actually Paid to Non-PEO NEOs | Value of Initial Fixed $100 Investment Based on: Total Shareholder Return | Net Income |
|---|---|---|---|---|---|---|---|---|---|---|
| Year | Liddell ($)(1) | Reininga ($)(1) | Werdein ($)(1) | Liddell ($)(1)(2) | Reininga ($)(1)(2) | Werdein ($)(1)(2) | ($)(3) | ($)(3)(4) | ($) | ($) |
| 2024 | 1,068,866 | — | — | 1,084,614 | — | — | 443,963 | 457,253 | 101 | 4,931,000 |
| 2023 | 568,257 | 165,680 | 395,645 | 568,257 | 43,602 | 392,907 | 252,540 | 226,038 | 83 | 4,820,000 |
| 2022 | — | 579,943 | — | — | 539,517 | — | 420,773 | 401,931 | 85 | 5,708,000 |

(1) For 2024, our PEO was Mr. Liddell. For 2023, our PEO was Mr. Liddell, and 2023 includes our two former PEOs: Mr. Werdein (March 10, 2023 through April 19, 2023) and Mr. Reininga (January 1, 2023 through March 10, 2023). Our PEO for 2022 was Mr. Reininga.

(2) SEC rules require certain adjustments be made to the Summary Compensation Table totals to determine “compensation actually paid” as reported in the Pay Versus Performance Table. “Compensation actually paid” does not necessarily represent cash and/or equity value transferred to the applicable NEO without restriction, but rather is a value calculated under applicable SEC rules. In general, “compensation actually paid” is calculated as Summary Compensation Table total compensation adjusted to include the change in fair value of equity awards as of December 31 of the applicable year or, if earlier, the vesting date (rather than the grant date) and the pension value attributable to the applicable year’s service and any change in pension value attributable to plan amendments made in the applicable year. In accordance with the requirements of Item 402(v) of Regulation S-K, the adjustments in the table below were made to Mr. Liddell's respective 2024 total compensation to determine the 2024 compensation actually paid:

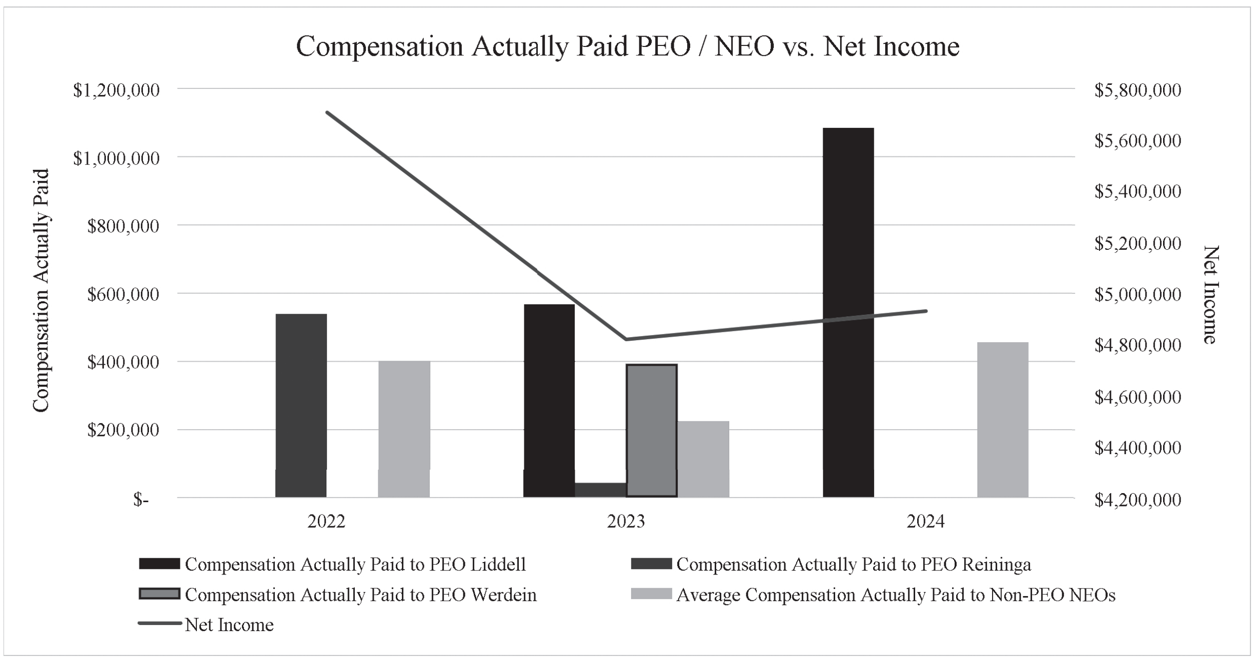
| | 2024 Liddell |
|---|---|
| Total Compensation as reported in Summary Compensation Table (SCT) | $ 1,068,866 |
| Less: Fair value of equity awards reported in SCT | (55,192) |
| Fair value of equity awards (restricted stock and stock options) granted in current year—value at end of year-end | 70,940 |
| Change in fair value from end of prior fiscal year to vesting date for equity awards made in prior fiscal years that vested during current fiscal year | — |
| Change in fair value from end of prior fiscal year to end of current fiscal year for equity awards made in prior fiscal years that were unvested at end of current fiscal year | — |
| Dividends or other earnings paid on equity awards in the covered fiscal year prior to the vesting date that are not otherwise included in the total compensation for the covered fiscal year | — |
| Fair value of equity awards forfeited in current fiscal year determined at end of prior fiscal year | — |
| Compensation Actually Paid | $ 1,084,614 |

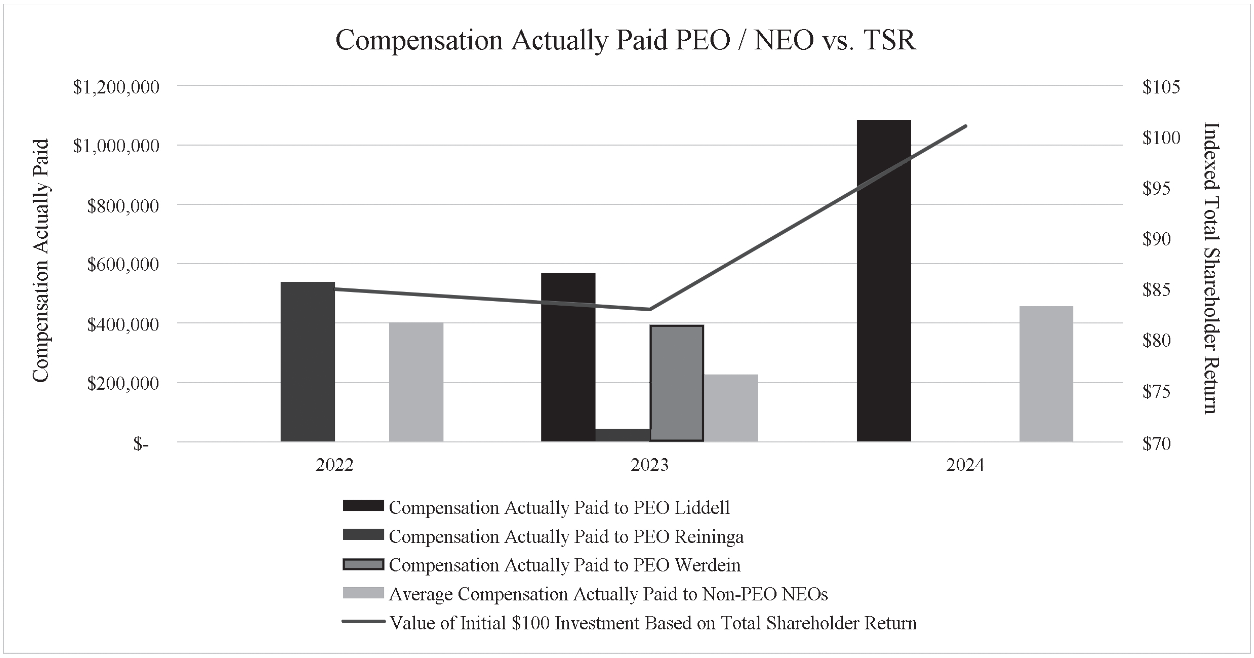
(3) In 2024, the non-PEO NEOs included Jeffrey Werdein, Executive Vice President, Commercial Division, and Taylor Gilden, Chief Financial Officer and Treasurer. In 2023, the non-PEO NEOs included Taylor Gilden, Chief Financial Officer and Treasurer, and Rachel Foley, Chief Operating Officer. Mr. Gilden joined the Company on June 5, 2023 as the Chief Strategy Officer. On August 1, 2023, Mr. Gilden was appointed as the Chief Financial Officer and Treasurer of the Company. In 2022, non-PEO NEOs included Jeffrey Werdein, Executive Vice President, Commercial Division, and Rachel Foley. In accordance with the requirements of Item 402(v) of Regulation S-K, the adjustments in the table below were made to the NEO’s total compensation to determine the compensation actually paid:

| | | 2024 |
|---|---|---|
| | | Average Non-PEO NEOs |
| Total Compensation as reported in SCT | $ | 443,963 |
| Less: Fair value of equity awards reported in SCT | | (35,870) |
| Fair value of equity awards granted in current year—value at end of year-end | | 46,105 |
| Change in fair value from end of prior fiscal year to vesting date for equity awards made in prior fiscal years that vested during current fiscal year | | (92) |
| Change in fair value from end of prior fiscal year to end of current fiscal year for awards made in prior fiscal years that were unvested at end of current fiscal year | | 3,147 |
| Dividends or other earnings paid on equity awards in the covered fiscal year prior to the vesting date that are not otherwise included in the total compensation for the covered fiscal year | | — |
| Fair value of equity awards forfeited in current fiscal year determined at end of prior fiscal year | | — |
| Compensation Actually Paid | $ | 457,253 |

## Relationship Disclosure

The charts below show, for the past three years, the relationship between the PEO and non-PEO "compensation actually paid" and (i) the Company's net income and (ii) the Company's TSR:




Compensation Actually Paid PEO / NEO vs. TSR
Compensation Actually Paid
$1,200,000
$1,000,000
$800,000
$600,000
$400,000
$200,000
$-
Indexed Total Shareholder Return
$105
$100
$95
$90
$85
$80
$75
$70
2022
2023
2024
Compensation Actually Paid to PEO Liddell
Compensation Actually Paid to PEO Reininga
Compensation Actually Paid to PEO Werdein
Average Compensation Actually Paid to Non-PEO NEOs
Value of Initial $100 Investment Based on Total Shareholder Return

## EQUITY COMPENSATION PLAN INFORMATION

The following table presents certain information regarding our Equity Compensation Plans in effect as of December 31, 2024 (the 2006 Stock Option Plan and 2012 Equity Incentive Plan). The 2025 Equity Incentive Plan is not included in the table since it became effective upon shareholder approval on February 4, 2025.

| Plan Category | Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights | Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights ($) | Number of Securities Remaining Available for Future Issuance Under Equity Compensation Plans (excluding securities reflected in the first column) |
|---|---|---|---|
| Equity compensation plans approved by security holders | | | |
| 2006 Stock Option Plan | 27,822 | 14.38 | — |
| 2012 Equity Incentive Plan | | | — |
| Stock Options | 13,100 | 11.76 | — |
| Total | 40,922 | 14.38 | — |

## PROPOSAL THREE: RATIFICATION OF APPOINTMENT OF YOUNT, HYDE & BARBOUR, P.C.

The Audit Committee has appointed the firm of Yount, Hyde & Barbour, P.C. as the Company's independent registered public accounting firm for the year ending December 31, 2025, subject to ratification of such appointment by the Company's shareholders. Representatives of Yount, Hyde & Barbour, P.C. are not expected to attend the Annual Meeting and will not make a statement. Additional information regarding the Audit Committee is provided in the "Audit Committee Report" below.

**THE BOARD OF DIRECTORS UNANIMOUSLY RECOMMENDS A VOTE "FOR" THE RATIFICATION OF THE APPOINTMENT OF YOUNT, HYDE & BARBOUR, P.C. AS THE COMPANY'S INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM FOR THE YEAR ENDING DECEMBER 31, 2025.**

***Change in Independent Registered Public Accounting Firm***

On October 17, 2023, the Company dismissed Baker Tilly US, LLP ("Baker Tilly") as the Company's independent registered public accounting firm effective as of the date Baker Tilly completed its audit of the Company's consolidated financial statements for the fiscal year ended December 31, 2023. On March 22, 2024, Baker Tilly completed its audit of the Company's consolidated financial statements for the fiscal year ended December 31, 2023. Accordingly, the dismissal was effective March 22, 2024. During the fiscal years ended December 31, 2022 and 2023 and the subsequent interim period from January 1, 2024 through March 22, 2024, there were no disagreements, either resolved to Baker Tilly's satisfaction or not, between the Company and Baker Tilly on any matter of accounting principles or practices, financial statement disclosure, or auditing scope or procedure, which disagreement if not resolved to the satisfaction of Baker Tilly, would have caused Baker Tilly to make reference to the subject matter of the disagreement in connection with its reports on the Company's consolidated financial statement for such years.

Baker Tilly's report on the financial statements of the Company included in the Company's annual reports on Form 10-K for the fiscal years ended December 31, 2022 and 2023 did not contain an adverse opinion, a disclaimer of opinion, and was not qualified or modified as to uncertainty, audit scope, or accounting principles. There were no "reportable events" as that term is defined in 304(a)(1)(v) of Regulation S-K during the fiscal years ended December 31, 2022 and 2023 and the subsequent interim period from January 1, 2024 through March 22, 2024.

Also on October 17, 2023, the Audit Committee engaged Yount, Hyde & Barbour, P.C. as the Company's independent registered public accounting firm for the Company's fiscal year ended December 31, 2024.

During the fiscal years ended December 31, 2021 and 2022, and the subsequent interim period from January 1, 2023 through October 17, 2023, neither the Company nor anyone on its behalf has consulted with Yount, Hyde & Barbour, P.C. regarding: (i) the application of accounting principles to a specific transaction, either completed or proposed, or the type of audit opinion that might be rendered on the Company's financial statements, and neither a written report nor oral advice was provided to the Company that Yount, Hyde & Barbour, P.C. concluded was an important factor considered by the Company in reaching a decision as to any accounting, auditing, or financial reporting issue; (ii) any matter that was the subject of a disagreement within the meaning of Item 304(a)(1)(iv) of Regulation S-K and the related instructions; or (iii) any reportable event within the meaning of Item 304(a)(1)(v) of Regulation S-K.

## PRINCIPAL ACCOUNTANT FEES AND SERVICES

The Audit Committee appointed Yount, Hyde & Barbour, P.C. as our independent registered public accounting firm for the year ended December 31, 2024 and such appointment was ratified by the shareholders of the Company at the Annual Meeting held on May 21, 2024. Yount, Hyde & Barbour, P.C. has audited our consolidated financial statements since 2024.

### Fees Incurred

The following table presents fees paid by the Company in 2024 for professional audit and other services provided by Yount, Hyde & Barbour, P.C., our independent registered public accounting firm:

| | | 2024 |
|---|---|---|
| Audit Fees(1) | $ | 142,306 |
| Audit-related fees(2) | | 28,000 |
| Tax fees(3) | | — |
| All other fees(4) | | — |
| Total | $ | 170,306 |

(1) Includes professional services rendered for the audit of the Company's annual consolidated financial statements and review of consolidated financial statements included in Forms 10-Q, or services normally provided in connection with statutory and regulatory filings, including out-of-pocket expenses.

(2) Audit-related fees include services rendered for the 2024 State of New York Mortgage Agency ("SONYMA") audit and services rendered for the audit of the Lake Shore Savings and Loan Association 401(k) Savings Plan and ESOP of Lake Shore Bancorp, Inc., including out-of-pocket expenses.

(3) No tax fees incurred in 2024.

(4) No other fees incurred in 2024.

### Audit Committee Pre-Approval Policy

Consistent with SEC and Public Company Accounting Oversight Board requirements regarding auditor independence, the Audit Committee has responsibility for appointing, setting compensation and overseeing the work of our independent registered public accounting firm. In recognition of this responsibility, the Audit Committee has established a policy regarding pre-approval of all audit and permissible non-audit services provided by the independent registered public accounting firm.

***Pre-approval of Services.*** The Audit Committee shall pre-approve all auditing services and permitted non-audit services (including the fees and terms) to be performed for us by our independent registered public accounting firm, subject to the de minimis exception for non-audit services described below which, if not pre-approved, are approved by the Audit Committee prior to completion of the audit.

***Exception.*** The pre-approval requirement set forth above, shall not be applicable with respect to non-audit services if:

- the aggregate amount of all such services provided constitutes no more than five percent of the total amount of revenues paid by us to our independent registered public accounting firm during the fiscal year in which the services are provided;
- such services were not recognized by us at the time of the engagement to be non-audit services; and
- such services are promptly brought to the attention of the Audit Committee and approved prior to the completion of the audit by the Audit Committee or by one or more members of the Audit Committee who are members of the Board of Directors to whom authority to grant such approvals has been delegated by the committee.

During the year ended December 31, 2024, the Audit Committee pre-approved the services performed by our independent registered public accounting firm in accordance with their policy. The de minimis exception (as defined in Rule 202 of the Sarbanes-Oxley Act) was not applied to any of the 2024 total fees.

***Delegation.*** The Audit Committee may delegate to one or more designated members of the Audit Committee the authority to grant required pre-approvals. The decisions of any member to whom authority is delegated under this paragraph to pre-approve activities under this subsection shall be presented to the full committee at its next scheduled meeting.

## AUDIT COMMITTEE REPORT

On March 11, 2025, the Audit Committee of the Board of Directors reviewed and discussed with management the audited consolidated financial statements dated December 31, 2024. The Audit Committee also discussed with Yount, Hyde & Barbour, P.C., the independent registered public accounting firm of the Company, the matters required to be discussed with those charged with governance pursuant to the applicable requirements of the Public Company Accounting Oversight Board ("PCAOB") and the Securities and Exchange Commission.

The Audit Committee has received from Yount, Hyde & Barbour, P.C., the written disclosure and the letter required by applicable requirements of the PCAOB regarding Yount, Hyde & Barbour's communications with the Audit Committee concerning independence and has discussed Yount, Hyde & Barbour's independence with its representatives. These items relate to that firm's independence from the Company.

Based on its review and discussions referred to above, the Committee has recommended to the Board of Directors that the audited consolidated financial statements be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2024 for filing with the Securities and Exchange Commission.

**Lake Shore Bancorp, Inc. Audit Committee**

Ann M. Segarra, Chairperson
Jack L. Mehltretter
John P. McGrath

*This foregoing audit committee report is not "soliciting material," is not deemed "filed" with the SEC, and shall not be deemed incorporated by reference by any general statement incorporating by reference this Proxy Statement into any filing of ours under the Securities Act of 1933, as amended, or under the Securities Exchange Act of 1934, as amended, except to the extent we specifically incorporate this report by reference.*

## SECTION 16(a) BENEFICIAL OWNERSHIP REPORTING COMPLIANCE AND TRANSACTIONS WITH RELATED PERSONS

### Delinquent Section 16(a) Reports

Section 16(a) of the Securities Exchange Act of 1934 requires our directors and executive officers, and persons who own more than 10% of our common stock, to report to the SEC their initial ownership of our common stock and any subsequent changes in that ownership. We are required to disclose in this proxy statement any late filings or failures to file.

To our knowledge, based solely on our review of the copies of such reports furnished to us and written representations that no other reports were required during the year ended December 31, 2024, we believe that all Section 16(a) filing requirements applicable to our executive officers and directors during 2024 were met.

### Transactions with Related Persons

Lake Shore Savings Bank has outstanding loans to its directors, executive officers and their related interests. These loans: (1) were made in the ordinary course of business; (2) were made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable loans with persons not related to Lake Shore Savings; and (3) did not involve more than the normal risk of collectability or present other unfavorable features.

It is the written policy of our Board of Directors that a majority of the disinterested members of the entire Board of Directors must approve in advance any extension of credit to any executive officer, director, or principal shareholder and their related interests if the aggregate of all extensions of credit to that insider and his or her related interests exceeds the greater of $25,000 or 5% of Lake Shore Savings' unimpaired capital and surplus, whichever is greater. The interested party may not participate either directly or indirectly in the voting on such an extension of credit. Prior approval is required, however, for any and all extensions of credit to any insider if the aggregate of all other extensions to that person and their related interests exceeds $500,000, regardless of its percentage of capital.

In addition, pursuant to our Code of Conduct and Ethics, if an officer or director has an interest in a matter or transaction before the Board of Directors, such individual must disclose to the Board of Directors all material non-privileged information relevant to the Board of Directors' decision on the matter or transaction, including: (1) the existence, nature and extent of their interest; and (2) the facts known to the individual as to the matter or transaction under consideration. The individual must also refrain from participating in the discussion of the matter or transaction and may not vote on the matter or transaction. In addition to approval by the Board of Directors, such transactions and matters must also be approved by the Nominating and Corporate Governance Committee.

## ADDITIONAL INFORMATION

### Shareholder Proposals for 2026 Annual Meeting

If you wish to submit proposals to be included in our proxy statement for the 2026 Annual Meeting of shareholders, we must receive them on or before December 12, 2025, pursuant to proxy soliciting regulations of the SEC. Nothing in this paragraph shall be deemed to require us to include in our proxy statement and proxy card for such meeting any shareholder proposal which does not meet the requirements of the SEC in effect at the time. Any such proposal will be subject to 17 C.F.R. §240.14a-8 of the Rules and Regulations promulgated by the SEC under the Securities Exchange Act of 1934, as amended. Under SEC Rule 14a-19, a shareholder intending to engage in a director election contest with respect to Lake Shore Bancorp's annual meeting of shareholders to be held in 2026 must give Lake Shore Bancorp notice of its intent to solicit proxies by providing the names of its nominees and certain other information at least 60 calendar days before the anniversary of the previous year's annual meeting. This deadline is March 23, 2026.

In addition to the requirement set forth under SEC Rule 14a-19, under our bylaws, any new business or director nominees to be taken up at the annual meeting must be stated in writing and filed with the secretary of Lake Shore Bancorp at least 30 days before the date of the annual meeting, provided, however, that in the event less than 40 days notice of the annual meeting is given, a written proposal or nomination may be accepted from a shareholder not later than the close of business on the tenth day following notice of the annual meeting, and all business so stated, proposed, and filed shall be considered at the annual meeting so long as the business relates to a proper matter for shareholder action. Any shareholder may make any other proposal or nomination at the annual meeting and the same may be discussed and considered, but unless stated in writing and filed with the secretary at least 30 days before the meeting, such proposal or nomination shall be laid over for action at an adjourned, special or annual meeting of the shareholders taking place 30 days or more thereafter. A shareholder's notice to the secretary shall set forth as to each such matter the shareholder proposes to bring before the annual meeting (1) a brief description of the proposal desired to be brought or nominee; and (2) the name and address of such shareholder and the number of shares of common stock of Lake Shore Bancorp that such shareholder owns of record. This provision shall not prevent the consideration and approval or disapproval at the annual meeting of reports of officers, directors, and committees; but in connection with such reports, no new business shall be acted upon at such annual meeting unless stated and filed as herein provided.

By Order of the Board of Directors,

/s/ Eric Hohenstein

Eric Hohenstein
*Corporate Secretary*

Dunkirk, New York
April 11, 2025

**To assure that your shares are represented at the Annual Meeting, please vote your shares promptly over the Internet, by phone or on a paper proxy card if you request one.**

# 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, 2024**

☐ 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** | **20-4729288** |
| *(State or Other Jurisdiction of Incorporation or Organization)* | *(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 | ☐ | | Accelerated filer | ☐ |
| Non-accelerated filer | ☒ | | Smaller reporting company | ☒ |
| Emerging growth company | ☐ | | | |

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, 2024 was $22,027,733 based on the per share closing price as of June 30, 2024 on the Nasdaq Global Market for the registrant's common stock, which was $12.51.

There were 5,733,075 shares of the registrant's common stock, $.01 par value per share, outstanding at March 10, 2025.

DOCUMENTS INCORPORATED BY REFERENCE:

| | Part of 10-K where incorporated |
|---|---|
| Portions of the registrant's Proxy Statement for the 2025 Annual Meeting of Stockholders | III |

**LAKE SHORE BANCORP, INC.**
**ANNUAL REPORT ON FORM 10-K**
**FOR THE FISCAL YEAR ENDED**
**DECEMBER 31, 2024**

## TABLE OF CONTENTS

## 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, 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, geopolitical conflicts, public health issues, 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 and changes, 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 (63.4% as of December 31, 2024) 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 Bancorp'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, 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 ten 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, 2023, 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. Given the significant restructuring of the local economy that has occurred within the region over the past few decades, the regional economy is considered diversified with a housing market that remains strong and various commercial and housing development projects continue to move forward to address local demand. 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. With our longstanding history in Chautauqua County, we had the third most, or 15.2% of the deposit market share of the county as of June 30, 2024, while our largest two competitors held 25.8% and 20.5%, respectively. Meanwhile, we continue our expansion in Erie County, where we held 0.5% of the deposit market share as of June 30, 2024, an increase from 0.4% in 2023, while the overall deposits at banks and savings institutions experienced a significant decrease during the same period.

Many of our competitors are larger and have greater financial resources than us. 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 our growth and adversely impact our 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 attempt to be competitive with all financial institutions in our service area with respect to interest rates paid on interest-bearing deposit products and interest rates charged on loans. We believe the primary factors in competing for deposits and loans is through personalized service, knowledge of the local market area and our 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. We also originate 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, 2024 and sets forth our fixed and adjustable rate loans at December 31, 2024, that are contractually due after December 31, 2025. 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 | $ 90 | $ 382 | $ 24,196 | $ 4,659 | $ 656 | $ 29,983 |
| After one year through five years | 1,904 | 2,838 | 99,436 | 7,186 | 335 | 111,699 |
| After five years through 15 years | 33,724 | 24,939 | 197,352 | 3,883 | — | 259,898 |
| Beyond 15 years | 125,613 | 19,297 | — | — | — | 144,910 |
| Total | $ 161,331 | $ 47,456 | $ 320,984 | $ 15,728 | $ 991 | $ 546,490 |
| **Interest rate terms on amounts due after one year:** | | | | | | |
| Fixed rate | $ 157,153 | $ 5,795 | $ 110,579 | $ 8,321 | $ 335 | $ 282,183 |
| Adjustable rate | 4,088 | 41,279 | 186,209 | 2,748 | — | 234,324 |
| Total | $ 161,241 | $ 47,074 | $ 296,788 | $ 11,069 | $ 335 | $ 516,507 |

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

The following table presents our gross loan originations, purchases, sales, and principal repayments for the years indicated. There were no sales of any loans in 2024 or 2023.

| | For the Year Ended December 31, | |
|---|---|---|
| | 2024 | 2023 |
| | (Dollars in thousands) | |
| Total Loans: | | |
| Balance outstanding at beginning of year | $ 558,536 | $ 576,709 |
| Originations: | | |
| Real estate loans: | | |
| Residential, one- to four-family[(1)] | 5,750 | 12,496 |
| Home equity | 7,236 | 13,470 |
| Commercial [(2)] | 34,850 | 26,400 |
| Other loans: | | |
| Commercial | 5,120 | 3,560 |
| Consumer | 364 | 410 |
| Total originations | 53,320 | 56,336 |
| Deduct: | | |
| Principal repayments: | | |
| Real estate loans | 58,925 | 67,359 |
| Commercial and consumer loans | 6,429 | 7,029 |
| Total principal repayments | 65,354 | 74,388 |
| Transfers to foreclosed real estate | — | 60 |
| Loans charged off | 12 | 61 |
| Total deductions | 65,366 | 74,509 |
| Balance outstanding at end of year | $ 546,490 | $ 558,536 |

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

***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, our primary lending activity is the origination of commercial real estate loans to finance the purchase or construction of real property or to refinance real property. For the majority of our commercial real estate loan portfolio, the collateral is primarily located within our primary market area, Erie and Chautauqua Counties. At December 31, 2024, commercial real estate loans, which include construction loans, totaled $321.0 million and represented 58.7% of our total gross loan portfolio.

Commercial real estate loans that are collateralized by residential properties and multi-family apartment complexes made up 40.0% of the commercial real estate loan portfolio as of December 31, 2024 and totaled $128.3 million with a weighted average interest rate of 5.45%. Commercial real estate construction loans and commercial real estate loans secured by land totaled $21.8 million, or 6.7% of the commercial real estate portfolio, at December 31, 2024 with a weighted average interest rate of 7.85%. Non-residential, non owner-occupied commercial real estate loans amounted to $112.6 million, or 35.1% of our commercial real estate portfolio, while non-residential, owner-occupied commercial real estate loans amounted to $58.3 million, or 18.2% of our commercial real estate portfolio. These amounts can be further disaggregated into the following concentrations:

| | At December 31, 2024 | | |
|---|---|---|---|
| | Gross Loan Balance | % of Total Commercial Real Estate | Weighted Average Interest Rate |
| Non-Residential, Non Owner-Occupied: | | | |
| Office | $ 39,813 | 12.4% | 5.41% |
| Retail | 28,101 | 8.8% | 5.63% |
| Hotel/Motel | 11,317 | 3.5% | 7.07% |
| Self Storage | 9,218 | 2.9% | 5.11% |
| Warehouse | 7,677 | 2.4% | 5.82% |
| Other | 16,493 | 5.1% | 5.44% |
| Total Non-Residential, Non Owner-Occupied | $ 112,619 | 35.1% | 5.63% |
| | | | |
| Non-Residential, Owner-Occupied | | | |
| Office | $ 24,952 | 7.8% | 6.16% |
| Warehouse | 13,316 | 4.1% | 5.34% |
| Restaurant | 11,804 | 3.7% | 6.87% |
| Other | 8,253 | 2.6% | 6.52% |
| Total Non-Residential, Owner-Occupied | $ 58,325 | 18.2% | 6.18% |

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 and reviewed by an independent firm prior to acceptance. 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 5 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.

At December 31, 2024, the average loan balance outstanding in the commercial real estate loan portfolio was $875,000 and the largest individual commercial real estate loan outstanding, net of participations sold, was a $10.6 million loan secured by multi-family real estate. This loan was performing in accordance with its original repayment terms at December 31, 2024.

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 commercial real estate lending is the borrower’s creditworthiness and the feasibility and cash flow potential of the project. Payments on commercial real estate loans 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, one- to four-family real estate loans, to adverse conditions in the real estate market or the economy. To monitor cash flows on commercial real estate loans, 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 commercial 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 our 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.

We originate commercial construction 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 renovation 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 typically converts to a commercial real estate mortgage.

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. We limit our 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, 2024, our one- to four-family residential loans (including residential construction loans) totaled $161.3 million and represented 29.5% of the total gross 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 (approximately 97.5% of the residential, one- to four-family portfolio at December 31, 2024); although we do offer adjustable rate loan products to our customers. We have historically retained the majority of residential mortgage loans that we originate.

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 that we originate 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 $766,550 loan balance during 2024) 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 2024, 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, 2024, residential, one- to four-family loans with balances in excess of the 2024 conforming loan limit totaled $4.7 million, or 3.5% 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, 2024 these loans represented $18.4 million, or 11.4% 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.

We originate construction-to-permanent loans for the purpose of construction of primary and secondary residences. At December 31, 2024, there were no residential construction-to-permanent loans outstanding. We issue a commitment that 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.

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 our risk. Construction delays may impair the borrower’s ability to repay the loan.

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.

***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, 2024, home equity loans and lines of credit totaled $47.5 million and represented 8.7% of the total gross 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 we do not hold the first mortgage resulting in Lake Shore Savings Bank being in a secondary position in the event of collateral liquidation. At December 31, 2024, home equity loans and lines of credit where we do not hold the first mortgage represented 19.7% 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 Business 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, 2024, commercial business loans totaled $15.7 million, or 2.9% of the total gross loan portfolio. Most of our commercial business loans have fixed interest rates and are for terms generally not in excess of five years, while commercial lines of credit have variable interest rates. 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.

At December 31, 2024, our largest individual commercial business loan had an unpaid principal balance of $1.3 million and was secured by business equipment. At December 31, 2024, this loan was performing in accordance with its contractual terms.

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 form of repayment and may be insufficient to recover the outstanding balance of the loan. We engage a third party to conduct an annual credit review of the commercial business loan portfolio, including compliance with our underwriting standards and policy requirements.

***Consumer Loans***. To a lesser extent, we offer a variety of consumer loans. At December 31, 2024, consumer loans totaled $1.0 million, or 0.2% of the total gross 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 financial institution. The financial institution is typically a community bank located in New York State and its lending team is known by our commercial lenders. This allows us to meet the needs of our customers and comply with our 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, 2024, our sold participations in commercial real estate and commercial business loans totaled $19.5 million and $223,000, 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 where we are not the lead lender in the future if deemed appropriate and at December 31, 2024, our purchased participations where we are not the lead lender in commercial real estate and commercial business loans totaled $6.4 million and $32,000, respectively. All of our loan participations are collateralized by properties or business assets within our primary market area and governed by a loan participation agreement.

***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 $766,550 require approval by the Internal Residential Loan Committee; loans between $766,550 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 require majority approval by the Board Loan Committee. 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 and procedures 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, the New York State Real Property Actions and Proceedings Law, and other applicable regulatory guidelines. 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 or when a loan is modified due to a borrower experiencing financial difficulty, dependent on the loan type. 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, principal forgiveness, an interest rate reduction, an other-than-insignificant payment delay, or a term extension. We identify 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, dependent on loan type, and may result in specific reserves within the allowance for credit losses and subsequent charge-offs, if appropriate. We had no loan modifications with borrowers experiencing financial difficulty for the year ended December 31, 2024. We had two loan modifications with one borrower during 2023 in which a term extension concession was granted for the year ended December 31, 2023.

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 our loan portfolio. The credit quality grade helps management make a consistent assessment of each loan relationship’s credit risk. Consistent with regulatory guidelines, we classify 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 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, consider that classification in our allowance for credit losses described below. 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, we 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 past, current, and future national and local economic conditions. There may be other factors that may warrant consideration in maintaining the allowance. Although we believe that we have established and maintained the allowance for credit losses to reflect losses inherent in our loan portfolio, based on our 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 allowance for credit losses.

The following table presents our allocation of the allowance for credit losses by loan category and the percentage of gross loans in each category to total gross 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, | | | | | |
|---|---|---|---|---|---|---|
| | 2024 | | | 2023 | | |
| | 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] | $ 390 | 7.5% | 29.5% | $ 532 | 8.2% | 30.8% |
| Home equity | 137 | 2.7% | 8.7% | 213 | 3.3% | 9.3% |
| Commercial[2] | 4,171 | 81.3% | 58.7% | 5,231 | 81.0% | 56.8% |
| | 4,698 | 91.5% | 96.9% | 5,976 | 92.5% | 96.9% |
| Other loans: | | | | | | |
| Commercial | 421 | 8.2% | 2.9% | 471 | 7.3% | 3.0% |
| Consumer | 14 | 0.3% | 0.2% | 16 | 0.2% | 0.1% |
| | 435 | 8.5% | 3.1% | 487 | 7.5% | 3.1% |
| Balance at end of year | $ 5,133 | 100.0% | 100.0% | $ 6,463 | 100.0% | 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 Lake Shore Savings 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 and deposit relationships, 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 of Directors designates members of executive management with the authority to purchase and sell 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.

We have classified all of our 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 a risk analysis, which includes a review of third party research and analytics. If this analysis indicates that an issuer of a security illustrates credit deterioration that would result in the existence of a potential credit related loss, we will 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, 2024 resulted in two private-label asset-backed securities being classified, which is consistent with our position taken at December 31, 2023, 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 we 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, 2024.

We assessed whether we intended to or would be more likely than not required to sell our 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, 2024 and December 31, 2023. During the years ended December 31, 2024 and 2023, we recaptured $6,000 and $7,000 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.*** We own several Bank Owned Life Insurance ("BOLI") policies totaling $29.3 million and $29.4 million at December 31, 2024 and 2023, 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 employees and non-employee directors are insured, and the 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. We have worked closely with our 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. 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 our regulators. This asset is considered illiquid because, although we 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 primary 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, 2024 and 2023, we had $10.5 million and $12.9 million, respectively, of depositor funds placed in the IntraFi Network Deposits program. We had no brokered time deposits at December 31, 2024, while there were $16.0 million of brokered time deposits at December 31, 2023.

When we determine our deposit rates, we consider local competition, U.S. Treasury securities offerings, the Fed Funds rate, 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, 2024 and 2023.

| | Period to maturity at December 31, 2024 | | | | 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 | 2024 | 2023 |
| | (Dollars in thousands) | | | | | |
| Interest Rate Range | | | | | | |
| 0.49% and below | $ 7,596 | $ 2,310 | $ 917 | $ 185 | $ 11,008 | $ 20,785 |
| 0.50% to 0.99% | 434 | 3,168 | 1,417 | 969 | 5,988 | 6,697 |
| 1.00% to 1.99% | 3,714 | — | 7 | — | 3,721 | 6,691 |
| 2.00% to 2.99% | 12,468 | 3 | 1 | — | 12,472 | 19,967 |
| 3.00% to 3.99% | 23,070 | 11,044 | 2,964 | 853 | 37,931 | 12,275 |
| 4.00% to 4.99% | 93,805 | — | 109 | 1,773 | 95,687 | 93,738 |
| 5.00% to 5.99% | 40,867 | — | — | — | 40,867 | 60,661 |
| Total | $ 181,954 | $ 16,525 | $ 5,415 | $ 3,780 | $ 207,674 | $ 220,814 |

At December 31, 2024 and 2023, time deposits with remaining terms to maturity of less than one year amounted to $182.0 million and $150.5 million, respectively.

At December 31, 2024 and 2023, we had $77.5 million, or 13.5% of total deposits, and $75.7 million, or 12.8% of total deposits, respectively, in uninsured deposits in excess of the FDIC insurance limit of $250,000. At December 31, 2024, we had $33.9 million in time deposits with balances of $250,000 or more maturing as follows:

| Maturity Period | Amount |
|---|---|
| | (In thousands) |
| Three months or less | $ 12,894 |
| Over three months through six months | 10,774 |
| Over six months to twelve months | 5,049 |
| Over twelve months | 5,212 |
| Total | $ 33,929 |

***Borrowings.*** We maintain borrowing arrangements in the form of lines of credit through one depository institution. We may also obtain term borrowings from the FHLBNY. Our borrowings typically consist of long-term FHLBNY advances. At December 31, 2024 and December 31, 2023 we had $10.3 million and $35.3 million, respectively, of long-term debt from the FHLBNY.

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 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 our success.

As of December 31, 2024, Lake Shore Savings Bank employed 93 full-time employees and 7 part-time employees. Lake Shore Savings employees are not represented by a collective bargaining unit. Management believes that it has good relations with our employees.

Management encourages and supports the growth and development of all our 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, we seek to fill 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 401(k), profit sharing, and ESOP programs, we facilitate the future financial well-being of our 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 Bank 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 Bank's 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 the Bank's 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.

## 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 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 credit losses limited to a maximum of 1.25% of risk-weighted assets and, for institutions that have exercised an opt-out election regarding the treatment of Accumulated Other Comprehensive Income ("AOCI"), up to 45% of net unrealized gains on equity securities with readily determinable fair market values. Institutions that have not exercised the AOCI opt-out have AOCI incorporated into common equity Tier 1 capital. 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 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, 2024, Lake Shore Savings' capital exceeded the minimum requirement of the community bank leverage ratio with a ratio of 13.83% 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, 2024, 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, 2024, 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.

The Dodd-Frank Act made noncompliance with the QTL test potentially subject to agency enforcement action for violation of law. At December 31, 2024, 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 10% 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. The new CRA regulations are subject to ongoing litigation with current enforcement of the new regulation currently enjoined.

***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, 2024, 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 indicate 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.

The federal bank regulatory agencies require 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.

***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 Crises 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 Bank 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 has authority to increase insurance assessments or issue special assessments.

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. As of December 31, 2024, 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 Bank 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, 2024, 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. The Bank's 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 mortgage loans for one- to four-family residential real estate receive various disclosures, including good faith estimates of settlement costs, lender servicing and escrow account practices, and prohibiting certain practices that increase the cost of settlement services;
- The TILA-RESPA Integrated Disclosure Rule, commonly known as the TRID rule. This rule amended the Truth in Lending Act and the Real Estate Settlement Procedures Act to integrate several consumer disclosures for mortgage loans;
- 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;
- USA PATRIOT Act, which requires banks operating to, among other things, establish broadened anti-money laundering compliance programs, due diligence policies, and controls to ensure the detection and reporting of money laundering. Such required compliance programs are intended to supplement existing compliance requirements, also applicable to financial institutions, under the Bank Secrecy Act and the Office of Foreign Assets Control regulations; and
- 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. On April 2, 2024, members voted to approve Lake Shore, MHC's ability to waive its right to receive dividends aggregating up to $0.72 per share that were declared by the Company in the 12 months subsequent to the approval of the dividend waiver. Following the approval of the Federal Reserve Board on April 25, 2024, the Company resumed the payment of quarterly cash dividends to its public stockholders and paid four quarterly cash dividends of $0.18 per share during 2024 and the first quarter of 2025. Lake Shore, MHC waived its right to all four dividend payments. On March 11, 2025, the Company suspended future dividend payments pending the completion of the Conversion Transaction (defined below). 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"). On January 27, 2024, the Board of Directors of Lake Shore, MHC, adopted a Plan of Conversion and Reorganization pursuant to which Lake Shore, MHC will undertake a "second step" conversion from the mutual holding company structure to the stock holding company structure. In connection with the second step conversion, the Bank is seeking regulatory approval to convert its charter to a New York-chartered commercial bank.

As a result of the proposed transaction, a new stock holding company for the Bank (the "New Bank Holding Company"), will succeed the Company, and will offer for sale shares of its common stock, representing Lake Shore, MHC's ownership interest in the Company, to depositors of the Bank in a subscription offering and, if necessary, a community offering and/or a syndicated community offering. Eligible account holders of the Bank as of the close of business on December 31, 2023 have first priority non-transferable subscription rights to subscribe for shares of common stock of the New Bank Holding Company. The total number of shares of common stock of the New Bank Holding Company to be issued in the proposed stock offering will be based on the aggregate pro forma market value of the common stock of the New Bank Holding Company, as determined by an independent appraisal. In addition, each share of common stock of the Company owned by persons other than Lake Shore, MHC (the "minority shareholders") will be converted into and become the right to receive a number of shares of common stock of the New Bank Holding Company pursuant to an exchange ratio established at the completion of the proposed transaction. The exchange ratio is designed to preserve in the New Bank Holding Company the same aggregate percentage ownership interest that the minority shareholders will have in the Company immediately before the completion of the proposed transaction, exclusive of the purchase of any additional shares of common stock of the New Bank Holding Company by minority shareholders in the stock offering and the effect of cash received in lieu of issuance of fractional shares of common stock of the New Bank Holding Company, and adjusted to reflect certain assets held by Lake Shore, MHC.

The proposed transaction is expected to be completed in the third quarter of 2025, subject to regulatory approval, approval by the members of Lake Shore, MHC (i.e., depositors of the Bank), and approval by the shareholders of the Company, including by a separate vote of approval by the Company's minority shareholders. Detailed information regarding the proposed transaction, including the stock offering, will be sent to shareholders of the Company and members of Lake Shore, MHC following regulatory approval.

***Liquidation Rights.*** Each depositor of the Bank has both a deposit account 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.

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 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 described below as well as all other information included in this Annual Report on Form 10-K. 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. Past financial performance may not be a reliable indicator of future performance and historical trends should not be used to anticipate results or trends in future periods.

### Risks Related to Lending Activities

***We have a substantial amount of commercial real estate and commercial business loans, and we intend to continue to increase our originations of these types of loans. These loans involve credit risks that could adversely affect our financial condition and results of operations.*** As of December 31, 2024, commercial real estate (including commercial construction) and commercial business loans comprised in the aggregate 61.6% of our total gross loan portfolio. These types of loans may expose a lender to greater credit risk than residential loans secured by one- to four-family real estate because the historical losses have been higher for commercial loans. 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 loans 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 commercial loan portfolio. Higher prices for businesses and consumers and high unemployment could negatively affect our commercial 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. If we foreclose on these loans, our holding period for the collateral typically is longer than for a one- to four-family residential property because there are fewer potential purchasers of the collateral, which could cause us to increase our provision for credit losses and also adversely affect our operating results and financial condition.

***We have a significant number of loans secured by real estate, and a downturn in the local real estate market could negatively impact our profitability.*** At December 31, 2024, approximately $529.7 million, or 96.7%, of our total gross loan portfolio was classified as real estate loans. Most of the real estate securing these loans is located in our primary lending market, Erie and Chautauqua Counties in Western New York. Future declines in the real estate values in Erie and Chautauqua Counties and surrounding markets as a result of an economic downturn could significantly impair the value of the particular collateral securing our loans and our ability to sell the collateral upon foreclosure for an amount necessary to satisfy the borrower's obligations to us. This could require increasing our allowance for credit losses to address the decrease in the value of the real estate securing our loans, which could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

Unlike larger financial institutions that are more geographically diversified, our profitability depends primarily on the general economic conditions in our primary market area. Local economic conditions have a significant impact on our residential real estate, commercial real estate, construction, commercial business and consumer lending, including, the ability of borrowers to repay these loans and the value of the collateral securing these loans.

Deterioration in economic conditions could result in the following consequences, any of which could have a material adverse effect on our business, financial condition, liquidity and results of operations:

- demand for our products and services may decrease;
- loan delinquencies, problem assets and foreclosures may increase;
- collateral for loans, especially real estate, may decline in value, thereby reducing customers' future borrowing power, and reducing the value of assets and collateral associated with existing loans;
- the value of our securities portfolio may decrease; and
- the net worth and liquidity of loan guarantors may decrease, thereby impairing their ability to honor commitments made to us.

Moreover, a significant decline in general economic conditions, caused by inflation, acts of terrorism, an outbreak of hostilities or other international or domestic calamities or other factors beyond our control could further impact these local economic conditions and could further negatively affect our financial performance. In addition, deflationary pressures, while possibly lowering our operating costs, could have a significant negative effect on our borrowers, especially our business borrowers, and the values of underlying collateral securing loans, which could negatively affect our financial performance.

***Our non-residential, non-owner-occupied real estate loans may expose us to increased credit risk.*** At December 31, 2024, $112.6 million, or 35.1% of our total gross commercial real estate loan portfolio, consisted of loans secured by non-residential, non-owner-occupied real estate properties. At December 31, 2024, all of our non-residential, non-owner-occupied real estate loans were performing in accordance with their repayment terms. Loans secured by non-residential, non-owner-occupied properties generally expose a lender to greater risk of non-payment and loss than loans secured by non-residential, owner occupied properties because repayment of such loans depend primarily on the tenant's continuing ability to pay rent to the property owner, who is our borrower, or, if the property owner is unable to find a tenant, the property owner's ability to repay the loan without the benefit of a rental income stream. In addition, the physical condition of non-residential, non-owner-occupied properties is often below that of owner-occupied properties due to lenient property maintenance standards that negatively impact the value of the collateral properties. Furthermore, some of our non-residential, non-owner-occupied real estate loan borrowers have more than one loan outstanding with us. Consequently, an adverse development with respect to one credit relationship may expose us to a greater risk of loss compared to an adverse development with respect to a non-residential, owner-occupied or residential one- to four-family mortgage loan.

***Our historical emphasis on residential mortgage loans exposes us to lending risks.*** As of December 31, 2024, $161.3 million, or 29.5% of our total gross loan portfolio, was secured by residential, one- to four-family real estate loans and we intend to continue to make loans of this type. Residential, one- to four-family mortgage lending is generally sensitive to regional and local economic conditions that can significantly impact the ability of borrowers to meet their loan payment obligations, making loss levels difficult to predict. Declines in real estate values could cause some of our residential, one- to four-family mortgages to be inadequately collateralized, which would expose us to a greater risk of loss if we seek to recover on defaulted loans by selling the real estate collateral.

***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. Our 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.

***We have extended off-balance sheet commitments to borrowers which expose us to credit and interest rate risk.*** We enter into off-balance sheet arrangements in the normal course of business to meet the financing needs of our customers.

These off-balance sheet arrangements include commitments to grant loans, unfunded commitments to fund loans and lines of credit, and commercial and standby letters of credit which would impact our liquidity and capital resources to the extent customers accept or use these commitments. These instruments involve, to varying degrees, elements of credit and interest rate risk in excess of the amount recognized in the balance sheet. Our exposure to credit loss in the event of nonperformance by the other party to the financial instrument for commitments is represented by the contractual or notional amount of those instruments. We use the same credit policies in making commitments and conditional obligations as we do for on-balance sheet instruments.

## Risks Related To Our Business

***Low demand for real estate loans may lower our profitability.*** Making loans secured by real estate, including residential, 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 led by President and CEO, Kim C. Liddell, Executive Vice President Commercial Division, Jeff Werdein and Chief Financial Officer and Treasurer, Taylor Gilden. The competition for qualified personnel in the financial services industry is intense, and the loss of our key personnel or an inability to continue to attract, retain and motivate key personnel could adversely affect our business. We cannot assure you that we will be able to retain our existing key personnel or attract additional qualified personnel. Although we have employment and retentions agreement with Messrs. Liddell, Werdein, and Gilden, that contain 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 us 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. 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 business strategy includes growth, and our financial condition and results of operations could be negatively affected if we fail to grow or fail to manage our growth effectively. Growing our operations could also cause our expenses to increase faster than our revenues.*** Our business strategy primarily focuses on loan growth, funded by deposits. Achieving such growth may require us to attract customers that currently bank at other financial institutions in our market area. Our ability to successfully grow will depend on a variety of factors, including our ability to attract and retain experienced bankers, the continued availability of desirable business opportunities, the level of competition from other financial institutions in our market area and our ability to manage our growth. Growth opportunities may not be available or we may not be able to manage our growth successfully. If we do not manage our growth effectively, our financial condition and operating results could be negatively affected. Accordingly, any such business expansion can be expected to negatively impact our earnings until certain economies of scale are reached. Furthermore, there can be considerable costs involved in opening branches or loan production offices and expanding lending capacity, and generally a period of time is required to generate the necessary revenues to offset these costs, especially in areas in which we do not have an established presence. Accordingly, any such business expansion can be expected to negatively impact our earnings until certain economies of scale are reached. Our expenses could be further increased if we encounter delays in the opening of new branches or loan production offices.

***Acquisitions may disrupt our business and dilute stockholder value.*** We continually evaluate merger and acquisition opportunities of other financial institutions. As a result, negotiations may take place and future mergers or acquisitions with consideration consistent of cash and/or equity securities may occur. We would seek acquisition partners that offer us either significant market presence or the potential to expand our market footprint and improve profitability through economies of scale or expanded services. Acquired other banks or businesses may have an adverse effect on our financial results and may involve various other risks commonly associated with acquisitions, including, among other things:

- Payment of a premium over book and market values that may dilute our tangible book value and earnings per share in the short- and long-term;
- Potential exposure to unknown or contingent liabilities of the target company, as well as potential asset quality problems of the target company;
- Potential volatility in reported income associated with goodwill impairment losses;
- Difficulty and expense of integrating the operations and personnel of the target company;
- Inability to realize the expected revenue increases, cost savings, increases in geographic or product presence, and/or other projected benefits of acquisition;
- Potential disruption to our business and diversion of our management's time and attention;
- The possible loss of key employees and customers of the target company; and
- Potential changes in banking or tax laws or regulations that may affect the target company.

***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, insurance companies, and the U.S. Department of the Treasury. 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.

***Our asset size may make it more difficult for us to compete.*** Our asset size may make it more difficult to compete with other financial institutions that are larger and can more easily afford to invest in the marketing and technologies needed to attract and retain customers. Because our principal source of income is the net interest income we earn on our loans and investments after deducting interest paid on deposits and other sources of funds, our ability to generate the revenues needed to cover our expenses and finance such investments is limited by the size of our loan and investment portfolios. Accordingly, we are not always able to offer new products and services as quickly as our competitors. Our lower earnings may also make it more difficult to offer competitive salaries and benefits. In addition, our smaller customer base may make it difficult to generate meaningful non-interest income from non-traditional banking activities. Finally, as a smaller institution, we are disproportionately affected by the continually increasing costs of compliance with new banking and other regulations.

## 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 primarily 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 interest rates 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 have been adversely impacted by an increase in interest rates which occurred in 2022 and 2023 and remained elevated in 2024, because the majority of our interest-earning assets are long-term, fixed rate mortgage-related assets that did not re-price as long-term interest rates increase. If rates continue to rise, we would 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 would be incented to 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 and fund 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. Our core deposits, which is defined as our deposits other than certificates of deposit greater than $250,000 and brokered certificates of deposit, represented 94.1% of total deposits at December 31, 2024. Additional available unused sources of liquidity include borrowings from the Federal Reserve of New York discount window, FHLBNY borrowings, brokered deposits, and a line of credit with a correspondent bank. Liquidity is further provided by unencumbered, or unpledged, investment securities that totaled a fair value of $51.8 million at December 31, 2024. The availability of our line of credit with our correspondent bank may also be reduced or eliminated. Lastly, on February 27, 2025, the Federal Reserve Bank approved the Bank's application for uncollateralized intraday credit with an effective date of March 6, 2025. With this uncollateralized intraday credit, certain transactions will not be rejected for which there are insufficient funds in our Federal Reserve Master Account during normal hours of operation.

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 our 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 current interest rate environment has increased competition for liquidity and the premium at which liquidity is available to meet funding needs.

## Risks Related to Economic Conditions

***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, 2024, the year over year consumer price index ("CPI") increase was 2.9% primarily driven by increases in food, transportation, and shelter prices. High inflation, if sustained, could have an adverse effect on our business. The movement 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. The monetary policies of the Federal Reserve Board may be affected by certain policy initiatives of the new Administration, which has announced tariffs on certain U.S. trading partners (and has indicated additional tariffs and retaliatory tariffs against U.S. trading partners may be announced in the future) and has implemented stricter immigration policies. Although forecasts have varied, many economists are projecting that such policy initiatives may halt productivity growth and reduce available labor, creating inflationary pressures. Under such a scenario, the Federal Reserve Board may decide to maintain the federal funds rate at a relatively elevated level for a prolonged period of time. The extent and timing of the new Administration's policy changes and their impact on the policies of the Federal Reserve Board, as well as our business and financial results, are uncertain at this time.

## Risks Related to Operations

***We face significant operational risks because of our reliance on technology. Our information technology systems may be subject to failure, interruption or security breaches.*** The computer systems and network infrastructure we use could be vulnerable to hardware, software, 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 parties, unknown third parties or through cyber-attacks. The risk of a breach can exist whether information systems and services are in our hosted data centers or in our third party's data centers, including cloud-based computing services. Our operational risks include the risk of malfeasance by employees or persons outside our company, errors relating to transaction processing and technology, systems failures or interruptions, breaches of our internal control systems and compliance requirements, and business continuation and disaster recovery. There have been increasing efforts by third parties to breach data security at financial institutions. Such attacks include computer viruses, malicious or destructive code, phishing attacks, denial of service or information, or other security breaches that could result in the unauthorized release, gathering, monitoring, misuse, loss or destruction of confidential, proprietary and other information, damages to systems, or other material disruptions to network access or business operations. Breaches have occurred, and may occur again, in our systems and in the systems of our third party vendors. The risks 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. The occurrence of any failures, interruptions or security breaches of information systems used to process customer transactions could damage our reputation, result in a loss of customer business, subject us to additional regulatory scrutiny, or expose us to civil litigation and possible financial liability, any of which could have a material adverse effect on our financial condition, results of operations, and cash flows.

***We rely on third party vendors, which could expose us to and have exposed us to additional cybersecurity risks.*** Third party vendors provide key components of our business infrastructure, including certain data processing and information services. Accordingly, our operations are exposed to the risks that these vendors will not perform in accordance with our contractual agreements with them, or if such an agreement is not renewed by the third-party vendor or is renewed on terms less favorable to us. If our third-party providers encounter difficulties, or if we have difficulty communicating with those service providers, our ability to adequately process and account for transactions could be affected, and our business operations could be adversely affected, which could have a material adverse effect on our financial condition and results of operations. Threats to information security also exist in the processing of customer information through various other vendors and their personnel. To our knowledge, the services and programs provided to us by third parties have not experienced any material security breaches. However, the existence of cyber-attacks or security breaches at third parties with access to our data, such as vendors, may not be disclosed to us in a timely manner.

***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 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 such as Artificial Intelligence 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.

***We may be subject to risks and losses resulting from fraudulent activities that could adversely impact our financial performance and results of operations.*** As a bank, we are susceptible to fraudulent activity that may be committed against us or our clients, which may result in financial losses or increased costs to us or our clients, disclosure or misuse of our information or our client information, misappropriation of assets, privacy breaches against our clients, litigation or damage to our reputation. We are most subject to fraud and compliance risk in connection with the origination of loans, ACH transactions, wire transactions, ATM transactions, checking transactions, and debit cards that we have issued to our customers and through our online banking portals. We maintain a system of internal controls and insurance coverage to mitigate against such risks, including data processing system failures and errors, and customer fraud. If our internal controls fail to prevent or detect any such occurrence, or if any resulting loss is not insured or exceeds applicable insurance limits, it could have a material adverse effect on our business, financial condition and results of operations.

## Risks Related To Laws and Regulations

***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 Bank, 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 Bank, 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. Lake Shore Savings Bank and Lake Shore Bancorp, Inc. were all subject to enforcement actions with their regulators which were all lifted in late 2024 and 2025. 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.

***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.

***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. The Bank may distribute capital to Lake Shore Bancorp in an amount not exceeding net income for the current calendar period and the prior two calendar years 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.

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 are subject to the Community Reinvestment Act ("CRA") and fair lending laws, and failure to comply with these laws could lead to material penalties.*** The CRA, the Equal Credit Opportunity Act, the Fair Housing Act, and other fair lending laws and regulations impose nondiscriminatory lending requirements on financial institutions. The CFPB, the United States Department of Justice, and other federal agencies are responsible for enforcing these laws and regulations. A successful challenge to an institution's performance under the CRA or fair lending laws and regulations could result in a wide variety of sanctions, including paying damages and civil money penalties, injunctive relief, imposition of restrictions on merger and acquisition activity, and restrictions on expansion activity. Private parties may also have the ability to challenge an institution's performance under fair lending laws in private class action litigation.

***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. 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.

***The Federal Reserve Board may require us to commit capital resources to support Lake Shore Savings Bank, and we may not have sufficient access to such capital resources.*** Federal law requires that a holding company act as a source of financial and managerial strength to its subsidiary bank and to commit resources to support such subsidiary bank. Under the "source of strength" doctrine, the Federal Reserve Board may require a holding company to make capital injections into a troubled subsidiary bank and may charge the holding company with engaging in unsafe and unsound practices for failure to commit resources to a subsidiary bank. A capital injection may be required at times when the holding company may not have the resources to provide it and therefore may be required to attempt to borrow the funds or raise capital. Any loans by a holding company to its subsidiary bank are subordinate in right of payment to deposits and to certain other indebtedness of such subsidiary bank. In the event of a holding company's bankruptcy, the bankruptcy trustee will assume any commitment by the holding company to a federal bank regulatory agency to maintain the capital of a subsidiary bank. Moreover, bankruptcy law provides that claims based on any such commitment will be entitled to a priority of payment over the claims of the institution's general unsecured creditors, including the holders of its note obligations. Thus, any borrowing that must be done by Lake Shore Bancorp to make a required capital injection becomes more difficult and expensive and could have an adverse effect on our business, financial condition and results of operations. Moreover, it is possible that we will be unable to borrow funds when we need to do so.

***We qualify as a smaller reporting company, and any decision on our part to comply only with certain reduced reporting and disclosure requirements applicable to smaller reporting companies could make our common stock less attractive to investors.*** We are a smaller reporting company, and, for as long as we continue to qualify as a smaller reporting company, we may choose to take advantage of exemptions from various reporting requirements applicable to other public companies but not to smaller reporting companies, including, but not limited to, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and two years of audited financial statements in our annual report instead of three years. As long as we are a smaller reporting company that is also not an accelerated filer, we will not be subject to Section 404(b) of the Sarbanes-Oxley Act, which requires that our independent registered public accounting firm review and attest as to the effectiveness of our internal control over financial reporting. In addition, as a non-accelerated filer, we will have longer deadlines to file our periodic reports with the Securities and Exchange Commission.

We would remain a smaller reporting company and a non-accelerated filer for so long as our voting and non-voting equity held by non-affiliates ("public float") is less than \$250 million or our annual revenues are less than \$100 million and our public float is less than \$700 million. Public float is determined each year as of the end of a company's second fiscal quarter applicable at the end of the fiscal year involved.

As a result of our smaller reporting company status and non-accelerated filer status, our stockholders may not have access to certain information they may deem important, and investors may find our common stock less attractive if we choose to rely on these exemptions. This could result in a less active trading market for our common stock and the price of our common stock may be more volatile.

## Other Risks Related to Our Business

***We are a community bank and our ability to maintain our reputation, which is critical to the success of our business, may materially adversely affect our performance.*** We are a community bank, and our reputation is one of the most valuable components of our business. A key component of our business strategy is to rely on our reputation for customer service and knowledge of local markets to expand our presence by capturing new business opportunities from existing and prospective customers in our market area and contiguous areas. Threats to our reputation can come from many sources, including adverse sentiment about financial institutions generally, unethical practices, employee misconduct, failure to deliver minimum standards of service or quality, compliance deficiencies, cybersecurity incidents and questionable or fraudulent activities of our customers. Lake Shore Savings Bank and Lake Shore Bancorp, Inc. were all subject to enforcement actions with their regulators which were all lifted in late 2024 and 2025. Negative publicity regarding our business, employees, or customers, with or without merit, may result in the loss of customers and employees, costly litigation and increased governmental regulation, any or all of which could adversely affect our business and operating results.

***Legal and regulatory proceedings and related matters could adversely affect us.*** We have been and may in the future become involved in legal and regulatory proceedings. We consider most of the proceedings to be in the normal course of our business or typical for the industry; however, it is inherently difficult to assess the outcome of these matters, and we may not prevail in any proceedings or litigation. There could be substantial costs and management diversion in such litigation and proceedings, and any adverse determination could have a materially adverse effect on our business, brand or image, or our financial condition and results of our operations.

***Severe weather, acts of terrorism, geopolitical and other external events could impact our ability to conduct business.*** Weather-related events have adversely impacted our market area in recent years, especially areas located near flood prone areas. Such events that may cause significant flooding and other storm-related damage may become more common events in the future. Financial institutions have been, and continue to be, targets of terrorist threats aimed at compromising operating and communication systems. Such events could cause significant damage, impact the stability of our facilities and result in additional expenses, impair the ability of our borrowers to repay their loans, reduce the value of collateral securing repayment of our loans, and result in the loss of revenue. While we have established and regularly test disaster recovery procedures, the occurrence of any such event could have a material adverse effect on our business, operations and financial condition. Additionally, financial markets may be adversely affected by the current or anticipated impact of military conflict, including wars in Russia and Ukraine, and the Middle East, terrorism or other geopolitical events.

## 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. We have 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 our 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. Our management and Audit Committee have made compliance with Section 404 a high priority. We cannot be certain that these measures will ensure that we implement and maintain adequate controls over our 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 our operating results or cause us to fail to meet our reporting obligations. If we fail 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 our financial reporting, which could harm our business and the trading price of our 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 Bank. 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 2024. 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 that 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 ("IS") 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 polices, 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 works in concert with members of the Information Technology ("IT") Department, including the Bank's Chief Information Officer ("CIO"), to ensure the execution of the Programs. The aforementioned individuals meet with management on a monthly basis through an IT Steering Committee in which management assesses IS and IT risk.

Additionally, 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 IS issues that may affect the Company.

The ISO has served various roles involving anti-money laundering, law enforcement, security, and information technology for over 7 years. The ISO holds an undergraduate degree in Legal Studies and master's degree in Criminal Justice and Criminology. The ISO reports to the Chief Financial Officer ("CFO") as well as the Chairperson of the ERC. The CIO has served various roles in audit, information risk, information technology, and information security in multiple industries for over 12 years. The CIO holds an undergraduate degree in Management Information Systems and has attained the ISACA Certification in Certified Information Systems Auditor ("CISA"). The CIO reports to the Chief Executive Officer ("CEO").

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 ("NIST") 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 scans and periodic vulnerability and penetration testing performed by independent third parties. Non-technical vulnerabilities are identified through the IT and IS Assurance Program by conducting regular process and procedural reviews as well as risk assessments. The Company uses the FFIEC CAT and NIST CSF 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 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.

For the year ended December 31, 2024, 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 Operations.

## Item 2. Properties.

We conduct our business through our corporate headquarters, administrative offices, and ten branch offices. At December 31, 2024, the net book value of our buildings and premises was $6.6 million and the net book value of the computer equipment and other furniture and fixtures, and equipment at our offices totaled $608,000. 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:** | | |
| **Chautauqua County branches** | | |
| 128 East Fourth Street | | |
| Dunkirk, NY 14048 | Owned/Leased(1) | 1926 |
| 30 East Main Street | | |
| Fredonia, NY 14063 | Owned | 1996 |
| 1 Green Avenue, WE | | |
| Jamestown, NY 14701 | Owned/Leased(2) | 1996 |
| 106 East Main Street | | |
| Westfield, NY 14787 | Owned | 1998 |
| **Erie County branches** | | |
| 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 |
| **Administrative Offices:** | | |
| 125 East Fourth Street | | |
| Dunkirk, NY 14048 | Owned | 1995 |
| 123 East Fourth Street | | |
| Dunkirk, NY 14048 | Owned | 2001 |
| 115 East Fourth Street | | |
| Jamestown, NY 14701 | Owned | 1997 |

(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 2030, and has two, five-year extension terms that can be executed at our option.
(3) The lease expires in 2028 and has two, five-year extension terms that can be executed at our option.
(4) The lease expires in 2029.

## Item 3. Legal Proceedings.

At December 31, 2024, 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"). Following the approval of the Reserve Bank on April 25, 2024, the Company resumed the payment of quarterly cash dividends to its public stockholders and paid four quarterly cash dividends of $0.18 per share during 2024 and the first quarter of 2025. Lake Shore, MHC waived its right to all four dividend payments. On March 11, 2025, the Company suspended the payment of dividends pending the completion of the Conversion Transaction. 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 26, 2025, there were 642 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, 2024. The Company has suspended its stock repurchase program.

| Period | Total Number of Shares Purchased(1) | Average Price Paid per Share(1) | 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 (2) |
|---|---|---|---|---|
| October 1 through October 31, 2024 | — | $ — | — | 30,626 |
| November 1 through November 30, 2024 | 83 | $ 13.75 | — | 30,626 |
| December 1 through December 31, 2024 | 83 | $ 13.46 | — | 30,626 |
| **Total** | 166 | $ 13.61 | — | 30,626 |

(1) Shares purchased represent shares that were elected to be withheld from the vesting of restricted stock awards to cover income tax withholdings for the individuals upon vesting.

(2) On August 13, 2021, the Board of Directors of 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.

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 our financial performance.

### Recent Events

On January 27, 2025, the Boards of Directors of Lake Shore, MHC, Lake Shore Bancorp and Lake Shore Savings adopted a Plan of Conversion and Reorganization ("the Plan") pursuant to which Lake Shore, MHC will undertake a "second-step" conversion and Lake Shore Savings Bank, the wholly-owned subsidiary of Lake Shore Bancorp, will reorganize from the two-tier mutual holding company structure to the fully-public stock holding company structure. Following the conversion and reorganization, Lake Shore, MHC will cease to exist and a newly-chartered stock holding company (the "New Bank Holding Company") will succeed to Lake Shore Bancorp as the stock holding company of Lake Shore Savings Bank. In connection with the second step conversion, Lake Shore Savings Bank is seeking regulatory approval to convert its charter to a New York-chartered commercial bank. Lake Shore, MHC currently owns approximately 63.4% of the outstanding shares of common stock of Lake Shore Bancorp. The proposed transaction is expected to be completed in the third quarter of 2025, subject to regulatory approval, approval by the members of Lake Shore, MHC (i.e., depositors of the Bank), and approval by the stockholders of the Company, including by a separate vote of approval by the Company's minority stockholders. On March 11, 2025, the Company suspended the payment of dividends pending the completion of the second-step conversion.

### Business Strategy

In April 2023, Kim C. Liddell was appointed President and Chief Executive Officer of Lake Shore Savings Bank and its holding companies, Lake Shore Bancorp and Lake Shore, MHC, in order to lead a new management team to expeditiously resolve the Consent Order which Lake Shore Savings Bank entered into with the OCC in February 2023, as well as position the Bank for future market opportunities. The Consent Order required Lake Shore Savings Bank to correct certain deficiencies relating to information technology, security, automated clearing house program, audit, management and BSA/AML. In addition, Lake Shore Bancorp and Lake Shore, MHC entered into a written agreement with the Federal Reserve Bank of Philadelphia in June 2023 to support the remediation activities at Lake Shore Savings Bank. As a result of the new management team's efforts, the Consent Order was terminated by the OCC on December 3, 2024 followed by the termination of the written agreement with the Federal Reserve Bank of Philadelphia on March 4, 2025. With the resolution of the Consent Order and the written agreement, we can focus on our core strategy of positioning ourselves as a leading community bank, locally headquartered in Western New York, with more than 133 years of service to our community. We strive to accomplish our goals 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. Highlights of our current business strategy include the following:

***Provide high-quality, personalized service as a leading community bank to our local and loyal customers.*** We currently operate ten 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.

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.

***Grow our loan portfolio with an emphasis on commercial lending while maintaining our historical residential mortgage program.*** 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, particularly due to the interest rate risk inherent in holding long-term, fixed rate, residential, one- to four-family real estate loans in our portfolio. 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 mitigates interest rate risk. At December 31, 2024 and 2023, 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 58.7% and 56.8%, respectively, of total gross loans. At December 31, 2024, the Bank's commercial real estate portfolio as a percentage of its total capital as defined under the federal interagency guidance was 239%.

At December 31, 2024 and 2023, 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 29.5% and 30.8%, respectively, of total gross loans. Residential mortgage lending has historically been a significant part of our business, and we recognize that continuing to originate residential one- to four-family mortgage loans is essential to our status as a community-oriented bank. We may sell 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. We typically retain servicing rights when we sell one- to four-family residential mortgage loans. We did not sell any one- to four-family residential loans in the secondary market during the years ended December 31, 2024 or 2023.

***Manage credit risk to maintain a low level of non-performing assets.*** We remain committed to maintaining prudent underwriting standards and aggressively monitoring our loan portfolio to maintain asset quality. We have established an experienced commercial credit and lending team and we have implemented well-defined policies, a thorough and efficient loan underwriting process, and active credit monitoring. Furthermore, management and our Board of Directors review robust loan portfolio analytics on a monthly basis to identify trends that could represent heightened credit risk for the organization. As a result of our continued focus on credit risk management, we had non-performing assets of $3.8 million, or 0.55% of total assets, at December 31, 2024. Our goal is to continue to improve our asset quality through prudent underwriting standards and the diligence of our loan collection personnel.

***Increase our share of lower-cost core deposit growth.*** As a community-based bank, we are focused on growing core deposits within our local communities. As interest rates increased in recent years, customers migrated to higher cost certificates of deposit and we have made a concerted effort in recent periods to begin to reduce our reliance on higher cost certificates of deposit in favor of obtaining lower cost retail and commercial deposit accounts. We also continue to enhance our technology-based deposit products such as remote deposit capture, commercial cash management, and mobile deposits in order to accommodate business customers. Our core deposits (which is defined as our deposits other than certificates of deposit with a balance greater than $250,000 and brokered certificates of deposit), represented 94.1% of total deposits at December 31, 2024. Following our conversion to a New York-chartered commercial bank, we will be able to attract and accept municipal deposits which we believe can further enhance core deposits. We intend to continue our focus on core deposit growth by offering our retail and commercial customers a full selection of deposit-related services, and making further investments in technology so that we can enhance our value proposition and deliver high-quality, innovative products and services to our customers.

***Pursue opportunistic mergers and acquisitions.*** In addition to organic growth, we intend to pursue opportunities to acquire banks that offer opportunities for strong financial returns. We recognize the importance of scale and technological innovation in banking. Our primary focus will be on franchises that have strong core deposit and lending relationships, new product capabilities and contiguous market footprints, while maintaining an acceptable risk profile. In addition, we believe that the accelerated rate of consolidation in the banking industry will continue over the next several years providing us with the ability to prudently evaluate and acquire other financial institutions. However, we currently have no understandings or agreements with respect to acquiring any specific financial institution.

***Utilize technology to adapt to evolving customer needs.*** 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. We are committed to making investments in technology to make our organization more efficient and to meet customer needs. To this end, we have enhanced the security, monitoring, and updating of our customer systems via the deployment of a cloud-based computing system, in addition to the supporting hardware and software. During 2025, we continue to leverage the use of our core banking system to efficiently serve our customers and provide them with cutting-edge banking services for their convenience.

***Leverage management expertise.*** We intend to rely on management's extensive experience to execute our business strategy. Our new management team, led by Mr. Liddell, has a track record of profitably, growing financial institutions and creating value and providing liquidity for stockholders. With the enhancements to our management team over the last two years, we have positioned ourselves to capitalize on market opportunities and enhance our profitability.

***Attract and retain key talent.*** Key to our strategy is our ability to attract and retain exceptional talent. As a community-based bank, we are focused on recruiting experienced lenders with knowledge of our markets who have either been displaced or are dissatisfied due to consolidation. We will seek to attract lenders with local relationships that can have a near-term impact on growing our loan portfolio.

## Critical Accounting Estimates

Our consolidated financial statements are prepared in accordance with GAAP. As a result, we are required to make certain estimates, judgments, and assumptions that we believe are reasonable based upon the information available at that time. Critical accounting estimates include the areas where we have made what we consider to be particularly difficult, subjective, or complex judgments concerning estimates, and where these estimates can significantly affect our financial results under different assumptions and conditions. These estimates, judgments, and assumptions affect the reported amounts of assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the years presented. Actual results could be different from these estimates. We evaluate our critical accounting estimates and assumptions on an ongoing basis and update them as needed. Our significant accounting policies are presented in Note 2 - Summary of Significant Accounting Policies, to the Audited Consolidated Financial Statements included within Part II. Item 8. of this Annual Report on Form 10-K for the year ended December 31, 2024.

*Allowance for Credit Losses*

Management considers the allowance for credit losses to be a critical accounting estimate, given the uncertainty in estimating lifetime credit losses attributable to our portfolios of assets exhibiting credit risk, particularly in our loan portfolio, and the material effect that such judgments can have on our results of operations. Determining the amount requires significant judgment on the part of management, is multi-faceted, and can be imprecise. The level of the allowance for credit losses on loans is based on management's ongoing review of all relevant information, from internal and external sources, relating to past events, current conditions, and expectations of the future based on reasonable and supportable forecasts.

The allowance is established through a provision for credit losses in the Consolidated Statements of Income, and evaluation of the adequacy of the allowance for credit losses is performed by management on a quarterly basis. While management uses available information to anticipate credit losses, future additions to the allowance may be necessary based on changes in economic conditions or the composition of our portfolios. In addition, various regulatory agencies, as an integral part of their examination process, periodically review our allowance for credit losses. As of December 31, 2024 and December 31, 2023, the allowance for credit losses on loans totaled $5.1 million and $6.5 million, respectively. Due to the nature and composition of our lending activities, a significant portion of the allowance for credit losses on loans is allocated to the commercial real estate portfolio. As of December 31, 2024 and December 31, 2023, the allowance for credit losses on loans allocated to the total commercial real estate portfolio was $4.2 million, or 81.3%, and $5.2 million, or 81.0%, respectively.

Our methodology for maintaining our allowance for credit losses is based on historical experience and data, current economic information, and reasonable and supportable forecasts. Accordingly, the estimation of the allowance for credit losses is impacted by the economic forecasts utilized, which require the use of significant judgment. Deterioration in forecasted economic conditions may lead to further required increases to the allowance for credit losses. Conversely, improvements in forecasted economic conditions may warrant further reductions to the allowance for credit losses. In estimating the allowance for credit losses, management considers the sensitivity of the model and significant judgments and assumptions that could result in an amount that is materially different from management's estimate.

The allowance for credit losses is sensitive to various forecasted macroeconomic drivers, including the Federal Open Market Committee's ("FOMC") median forecasted U.S. civilian unemployment rate and the year-over-year change in U.S. Gross Domestic Product ("GDP"). While it is difficult to estimate how potential changes to various factors may impact the allowance for credit losses because such changes to factors may not occur at the same rate or in the same direction, management compared the modeled allowance for credit losses on loans to a hypothetical model using a downside economic forecast. Using an immediate "shock" or increase of 20 basis points in the FOMC's projected rate of U.S. civilian unemployment, and a decrease of 100 basis points in the FOMC's projected rate of U.S. GDP growth, this would increase the model's total calculated allowance for credit losses on loans by $507,000, or 9.9%, representing a ten basis points increase to the coverage ratio of the allowance for credit losses as a percentage of loans at amortized cost, assuming all other quantitative and qualitative factors are kept at current levels, as of December 31, 2024. This example is only one of the numerous possible economic scenarios that could be utilized in assessing the sensitivity of the allowance for credit losses and does not represent management's assumptions or judgment of factors as of December 31, 2024.

Unexpected changes in economic growth could adversely affect our results of operations, including causing increases in delinquencies and default rates on loans, which would adversely impact our charge-offs, allowance for credit losses, and provision for credit losses. Deterioration in real estate values, employment data and household incomes may also result in higher credit losses for us. Also, in the ordinary course of business, we may be subject to a concentration of credit risk to a particular industry, counterparty, borrower or issuer. A deterioration in the financial condition or prospects of a particular industry or a failure or downgrade of, or default by, any particular entity or group of entities could negatively impact our business, perhaps materially, and the systems by which we set limits and monitor the level of our credit exposure to individual entities and industries, may not function as we have anticipated.

**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 $496,000 and $552,000 for the years ended December 31, 2024 and 2023, respectively. Interest income on securities does not include a tax equivalent adjustment for bank qualified municipal bonds.

| | For the Year Ended December 31, 2024 | | | For the Year Ended December 31, 2023 | | |
|---|---|---|---|---|---|---|
| | 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 | $ 48,639 | $ 2,460 | 5.06% | $ 36,948 | $ 1,805 | 4.89% |
| Securities[1] | 60,347 | 1,631 | 2.70% | 67,840 | 1,941 | 2.86% |
| Loans, including fees | 547,525 | 30,713 | 5.61% | 567,319 | 30,009 | 5.29% |
| Total interest-earning assets | 656,511 | 34,804 | 5.30% | 672,107 | 33,755 | 5.02% |
| Other assets | 49,629 | | | 46,057 | | |
| **Total assets** | $ 706,140 | | | $ 718,164 | | |
| | | | | | | |
| **Interest-bearing liabilities** | | | | | | |
| Demand & NOW accounts | $ 67,023 | $ 64 | 0.10% | $ 76,495 | $ 75 | 0.10% |
| Money market accounts | 144,926 | 3,811 | 2.63% | 132,816 | 1,914 | 1.44% |
| Savings accounts | 59,095 | 40 | 0.07% | 70,600 | 47 | 0.07% |
| Time deposits | 220,856 | 9,162 | 4.15% | 206,218 | 6,033 | 2.93% |
| Borrowed funds & other interest-bearing liabilities | 21,465 | 664 | 3.09% | 38,701 | 1,328 | 3.43% |
| Total interest-bearing liabilities | 513,365 | 13,741 | 2.68% | 524,830 | 9,397 | 1.79% |
| Other non-interest bearing liabilities | 105,018 | | | 109,907 | | |
| Stockholders' equity | 87,757 | | | 83,427 | | |
| **Total liabilities & stockholders' equity** | $ 706,140 | | | $ 718,164 | | |
| Net interest income | | $ 21,063 | | | $ 24,358 | |
| Interest rate spread | | | 2.62% | | | 3.23% |
| Net interest margin | | | 3.21% | | | 3.62% |

(1) The tax equivalent adjustment for bank qualified tax exempt municipal securities, using a federal statutory rate of 21%, results in rates of 3.08% and 3.27% for the years ended December 31, 2024 and 2023, 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 later 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.

| | Year Ended December 31, 2024 Compared to Year Ended December 31, 2023 | | |
|---|---|---|---|
| | Rate | Volume | Net Change |
| | | (Dollars in thousands) | |
| **Interest-earning assets:** | | | |
| Interest-earning deposits & federal funds sold | $ 64 | $ 591 | $ 655 |
| Securities | (107) | (203) | (310) |
| Loans, including fees | 1,814 | (1,110) | 704 |
| Total interest-earning assets | 1,771 | (722) | 1,049 |
| **Interest-bearing liabilities:** | | | |
| Demand & NOW accounts | (2) | (9) | (11) |
| Money market accounts | 1,579 | 318 | 1,897 |
| Savings accounts | 1 | (8) | (7) |
| Time deposits | 2,522 | 607 | 3,129 |
| Total deposits | 4,100 | 908 | 5,008 |
| Other interest-bearing liabilities: | | | |
| Borrowed funds & other interest-bearing liabilities | (131) | (533) | (664) |
| Total interest-bearing liabilities | 3,969 | 375 | 4,344 |
| Total change in net interest income | $ (2,198) | $ (1,097) | $ (3,295) |

As shown in the above tables, the decrease in net interest income for the year ended December 31, 2024 as compared to the prior year was primarily due to an increase in the average rate paid on interest-bearing liabilities and an increase in the average balance of interest-bearing liabilities. Interest rate spread decreased by 61 basis points to 2.62% for the year ended December 31, 2024 as compared to 3.23% for the year ended December 31, 2023. Net interest margin decreased by 41 basis points to 3.21% for the year ended December 31, 2024 as compared to 3.62% for the year ended December 31, 2023.

## Comparison of Financial Condition at December 31, 2024 and December 31, 2023

Total assets at December 31, 2024 were $685.5 million, a decrease of $39.6 million, or 5.5%, as compared to $725.1 million at December 31, 2023 primarily due to decreases in cash and cash equivalents, net loans, and securities. Cash and cash equivalents decreased by $20.6 million, or 38.3%, from $53.7 million at December 31, 2023 to $33.1 million at December 31, 2024. The decrease was primarily due to a decrease in long-term debt due to the repayment of Federal Home Loan Bank of New York ("FHLBNY") borrowings of $25.0 million in 2024 and a decrease in total deposits of $17.9 million due to the non-renewal of $16.0 million of brokered certificate of deposits in 2024. The year-over-year decrease in cash and cash equivalents was partially offset by a decrease in net loans of $11.2 million, or 2.0%.

Securities decreased by $3.9 million, or 6.5%, from $60.4 million at December 31, 2023 to $56.5 million at December 31, 2024. The decrease was primarily the result of $3.2 million in repayments and maturities during 2024 and a decrease of $732,000 in the market value of the securities.

Net loans receivable decreased during the year ended December 31, 2024, as shown in the table below:

| | At December 31, 2024 | At December 31, 2023 | Change $ | % |
|---|---|---|---|---|
| | (Dollars in thousands) | | | |
| **Real Estate Loans:** | | | | |
| Residential, one- to four-family[1] | $ 161,331 | $ 172,005 | $ (10,674) | (6.2) % |
| Home equity | 47,456 | 51,869 | (4,413) | (8.5) % |
| Commercial[2] | 320,984 | 316,986 | 3,998 | 1.3 % |
| Total real estate loans | 529,771 | 540,860 | (11,089) | (2.1) % |
| **Other Loans:** | | | | |
| Commercial | 15,728 | 16,546 | (818) | (4.9) % |
| Consumer | 991 | 1,130 | (139) | (12.3) % |
| ***Total gross loans*** | 546,490 | 558,536 | (12,046) | (2.2) % |
| Allowance for credit losses | (5,133) | (6,463) | 1,330 | (20.6) % |
| Net deferred loan costs | 3,263 | 3,755 | (492) | (13.1) % |
| **Loans receivable, net** | $ 544,620 | $ 555,828 | $ (11,208) | (2.0) % |

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

The loans receivable, net balance decreased $11.2 million, or 2.0%, from $555.8 million at December 31, 2023 to $544.6 million at December 31, 2024. The decrease was primarily due to decreases in residential, one- to four-family and home equity loans. During the year ended December 31, 2024, we remained strategically focused on originating shorter duration, adjustable-rate commercial loans to diversify our asset mix and to manage interest rate risk while reducing our reliance on wholesale funding sources.

***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, 2024 | 2023 |
|---|---|---|
| | (Dollars in thousands) | |
| Balance at beginning of period | $ 6,463 | $ 7,065 |
| Impact of adopting ASC 326 | — | 282 |
| (Credit) provision for credit losses | (1,308) | (897) |
| Charge-offs: | | |
| Real estate loans: | | |
| Residential, one- to four-family | — | (3) |
| Other loans: | | |
| Consumer | (41) | (58) |
| Total charge-offs | (41) | (61) |
| Recoveries: | | |
| Real estate loans: | | |
| Residential, one- to four-family | 10 | 2 |
| Commercial | — | 35 |
| Other loans: | | |
| Commercial | — | 29 |
| Consumer | 9 | 8 |
| Total recoveries | 19 | 74 |
| Net (charge-offs) recoveries | (22) | 13 |
| Balance at end of period | $ 5,133 | $ 6,463 |
| | | |
| Average loans outstanding, including fees | $ 547,525 | $ 567,319 |
| Allowance for credit losses as a percent of loans at amortized cost | 0.93 % | 1.16 % |
| Allowance for credit losses as a percent of non-performing loans | 134.91 % | 193.09 % |

When compared to December 31, 2023, the current modeled allowance for credit losses related to the loan portfolio decreased by approximately $1.3 million, or 20.6%, of which a majority of the decrease was attributable to the commercial mortgage loan portfolio ($1.1 million). Of the total decrease in the allowance for credit losses on loans from December 31, 2023 to December 31, 2024, 99.2% of the attribution was due to a decrease in reserve rate, while 0.8% was due to a decrease in the size of the loan portfolio. The decrease in the ACL reserve rate was primarily due to the decrease in the quantitative loss factors derived from historical loss rates calculated in the vintage model as well as a decrease in the qualitative loss factors derived from trends in current economic conditions and forecasted economic trends which includes the FOMC's projected rate of U.S. civilian unemployment and U.S. year-over-year growth of GDP.

| | At or for the Year Ended December 31, | |
|---|---|---|
| | **2024** | **2023** |
| 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 % |
| Other loans: | | |
| Commercial | — % | 0.15 % |
| Consumer | (3.10) % | (4.41) % |
| Ratio of net recoveries to average loans outstanding | — % | — % |

For the year ended December 31, 2024, consumer loan net charge-offs to average consumer loans outstanding improved to 3.10% from 4.41% for the prior year. This improvement was primarily driven by a decrease in consumer loan net charge-offs of $18,000, partially offset by a decrease in average consumer loans outstanding of $122,000.

| | At December 31, 2024 | At December 31, 2023 |
|---|---|---|
| | (Dollars in thousands) | |
| **Loans accounted for on a non-accrual basis:** | | |
| Real estate loans: | | |
| Residential, one- to four-family[1] | $ 1,891 | $ 1,904 |
| Home equity | 683 | 196 |
| Commercial[2] | 1,226 | 1,242 |
| Other loans: | | |
| Commercial | — | — |
| Consumer | 4 | 5 |
| Total non-accrual loans | 3,804 | 3,347 |
| Total non-performing loans | 3,804 | 3,347 |
| Foreclosed real estate | — | 34 |
| Total non-performing assets | $ 3,804 | $ 3,381 |
| **Ratios:** | | |
| Non-performing loans as a percent of total net loans: | 0.69 % | 0.60 % |
| Non-performing assets as a percent of total assets: | 0.55 % | 0.47 % |

[1] Includes one- to four-family construction loans.
[2] Includes commercial construction loans.

Total non-performing assets increased by $423,000, or 12.5%, to $3.8 million at December 31, 2024 as compared to $3.4 million at December 31, 2023, primarily due to an increase in non-accrual loans, including one home equity loan totaling $539,000 which was moved to non-accrual status during the first quarter of 2024. Non-performing loans were $3.8 million at December 31, 2024 compared to $3.3 million at December 31, 2023. We had no loans past due 90 days or more but still accruing at December 31, 2024 or December 31, 2023. The Company had no foreclosed real estate at December 31, 2024 as compared to $34,000 at December 31, 2023.

Other assets decreased $2.1 million, or 16.0%, to $10.7 million at December 31, 2024 from $12.8 million at December 31, 2023. The decrease was primarily due to the $6.6 million of proceeds received from the surrender of bank-owned life insurance policies which was in process at the end of 2023, partially offset by a $3.1 million increase in annuity assets and a $707,000 increase in right of use lease assets.

The table below shows changes in deposit balances by type of deposit account between December 31, 2024 and December 31, 2023:

| | At December 31, 2024 | At December 31, 2023 | Change $ | Change % |
|---|---|---|---|---|
| | (Dollars in thousands) | | | |
| ***Core deposits*** | | | | |
| Demand deposits and NOW accounts: | | | | |
| Non-interest bearing | $ 96,412 | $ 95,186 | $ 1,226 | 1.3 % |
| Interest bearing | 65,020 | 72,966 | (7,946) | (10.9) % |
| Time deposits less than $250,000 | 173,745 | 166,381 | 7,364 | 4.4 % |
| Money market | 149,550 | 137,374 | 12,176 | 8.9 % |
| Savings | 54,322 | 64,584 | (10,262) | (15.9) % |
| Total core deposits | 539,049 | 536,491 | 2,558 | 0.5 % |
| ***Non-core deposits*** | | | | |
| Time deposits greater than $250,000 | 33,929 | 38,433 | (4,504) | (11.7) % |
| Brokered certificates of deposit | — | 16,000 | (16,000) | (100.0) % |
| Total non-core deposits | 33,929 | 54,433 | (20,504) | (37.7) % |
| **Total deposits** | $ 572,978 | $ 590,924 | $ (17,946) | (3.0) % |

The year-over-year decrease in total deposits was primarily due to the non-renewal of $16.0 million of brokered certificates of deposit, an 11.7% decrease in time deposits greater than $250,000, a 15.9% decrease in savings accounts, and a 10.9% decrease in interest bearing checking accounts. The decreases were partially offset by an increase in money market accounts of 8.9%, a 4.4% increase in time deposits less than or equal to $250,000, and an increase in non-interest bearing transaction accounts of 1.3%. The increase in money market deposits and time deposits less than or equal to $250,000 was primarily due to an increase in customer demand for these types of deposit products due to the high and competitive interest rate environment. Our 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, 2024 and December 31, 2023, our percentage of uninsured deposits to total deposits was 13.5% and 12.8%, respectively.

There were no short-term borrowings from the FHLBNY at December 31, 2024 or December 31, 2023. Long-term debt consisting of advances from the FHLBNY decreased by $25.0 million, or 70.9%, from $35.3 million at December 31, 2023 to $10.3 million at December 31, 2024. The borrowings were paid off at maturity as part of a balance sheet management strategy to focus on organic deposit growth and reduce reliance on wholesale funding sources.

Total stockholders' equity increased $3.6 million, or 4.2%, to $89.9 million at December 31, 2024 from $86.3 million at December 31, 2023. The increase in stockholders' equity during 2024 was primarily attributed to $4.9 million in net income earned, partially offset by dividends paid of $1.1 million and a $579,000 unrealized mark-to-market loss on the available-for-sale securities portfolio recognized in accumulated other comprehensive loss.

**Comparison of Results of Operations for the Year Ended December 31, 2024 and 2023**

***General.*** Net income was $4.9 million for the year ended December 31, 2024, or $0.88 per diluted share, an increase of $111,000, or 2.3%, compared to net income of $4.8 million, or $0.82 per diluted share, for the year ended December 31, 2023. Our 2024 financial performance was positively impacted by a decrease in non-interest expenses as a result of efforts to optimize operating expenses while reducing our reliance on wholesale funding by $41.0 million.

***Net Interest Income***. Net interest income decreased by $3.3 million, or 13.5%, to $21.1 million for the year ended December 31, 2024 as compared to $24.4 million for the year ended December 31, 2023. Interest income increased by 3.1% while interest expense increased by 46.2% for the year ended December 31, 2024 when compared to the year ended December 31, 2023. Interest rate spread and net interest margin were 2.62% and 3.21%, respectively, for the year ended December 31, 2024 as compared to 3.23% and 3.62%, respectively, for the year ended December 31, 2023.

***Interest Income.*** Interest income for the year ended December 31, 2024 was $34.8 million, an increase of $1.0 million, or 3.1%, compared to $33.8 million for the year ended December 31, 2023. The increase was due to a 28 basis points increase in the average yield on interest-earning assets primarily due to an increase in the average yield earned on loans. During the year ended December 31, 2024 as compared to the prior year, there was a $704,000 increase in interest income on loans due to a 32 basis points increase in the average yield on loans, partially offset by a decrease in the average balance of loans of $19.8 million, or 3.5%. The average yield on loans increased due to the higher interest rate environment while the average balance of loans decreased due to loan paydowns outpacing originations, primarily in one- to four- family real estate loans and home equity loans.

Interest-earning deposit income increased by $655,000, or 36.3%, to $2.5 million for the year ended December 31, 2024, as compared to $1.8 million for the year ended December 31, 2023. The increase in income during the most recent year was positively impacted by an increase in the average balance of interest-earning deposits of $11.7 million, or 31.6%, as well as a 17 basis points increase in the average yield earned on interest earning deposits. The average balance of interest-earning deposits increased due to loan and securities repayments received during the year that were not immediately redeployed into like-kind assets as well as the attribution of customer deposit balances throughout 2024. The average yield of interest-earning deposits for the year ended December 31, 2024 increased as the result of prudent treasury management.

Investment interest income decreased by $310,000, or 16.0%, to $1.6 million for the year ended December 31, 2024 compared to $1.9 million for the year ended December 31, 2023, due to a decrease in the average balance of securities of $7.5 million, or 11.0%, and a 16 basis points decrease in the average yield of the investment portfolio due to the repayment and maturities of higher yielding securities.

***Interest Expense.*** Interest expense for the year ended December 31, 2024 was $13.7 million, an increase of $4.3 million, or 46.2%, from $9.4 million for the year ended December 31, 2023. The increase in interest expense was primarily due to an 89 basis points increase in the average interest rate paid on interest-bearing liabilities. During the year ended December 31, 2024 as compared to the prior year, there was a $3.1 million increase in interest paid on time deposit accounts due to a 122 basis points increase in the average interest rate paid on time deposits along with an increase in average time deposit balances of $14.6 million, or 7.1%. The increase in the average rate paid on time deposit accounts was primarily due to the increase in market interest rates and deposit competition over the course of 2023 and into 2024. Average interest-bearing deposit balances were $491.9 million, a 1.2% increase during the year ended December 31, 2024 as compared to $486.1 million for the prior year, resulting from an increase in average time deposits and average money market accounts since December 31, 2023.

During the year ended December 31, 2024, interest expense on borrowed funds and other interest-bearing liabilities decreased by $664,000, or 50.0%, compared to the year ended December 31, 2023, primarily due to a $17.2 million decrease in average borrowed funds and other interest-bearing liabilities outstanding along with a 34 basis points decrease in the average rate paid on borrowed funds and other interest-bearing liabilities resulting from the repayment of higher-cost, short-term FHLBNY borrowings during 2024.

***(Credit) Provision for Credit Losses.*** We recorded a credit to the provision for credit losses of $1.5 million for the year ended December 31, 2024 as compared to a credit to the provision for credit losses of $1.0 million for the year ended December 31, 2023. For the year ended December 31, 2024, $1.3 million of the credit to the provision for credit losses related to the held-for-investment loan portfolio and $171,000 related to the reserve for unfunded commitments.

The decrease in the allowance for credit losses on loans and the corresponding credit to the provision for credit losses recognized during the year ended December 31, 2024 was the result of a decrease in the quantitative loss factors derived from historical loss rates calculated in the vintage model as well as a decrease in the qualitative loss factors derived from both current and forecasted economic trends.

Our allowance for credit losses on loans was $5.1 million as of December 31, 2024 as compared to $6.5 million as of December 31, 2023. Our allowance for credit losses on unfunded commitments was $314,000 as of December 31, 2024 as compared to $485,000 as of December 31, 2023. Non-performing assets as a percent of total assets increased to 0.55% at December 31, 2024 as compared to 0.47% at December 31, 2023, due to a decrease in total assets of $39.6 million, or 5.5%, and an increase in non-performing assets of $423,000, or 12.5%. Our allowance for credit losses on loans as a percent of loans at amortized cost was 0.93% at December 31, 2024 and 1.16% at December 31, 2023.

Refer to Note 5 of the Notes to the Audited Consolidated Financial Statements for additional details on our allowance for credit losses and corresponding credit to the provision for credit losses.

***Non-Interest Income.*** Non-interest income was $3.3 million for the year ended December 31, 2024, an increase of $669,000, or 25.4%, as compared to the year ended December 31, 2023. The increase was primarily due to a $313,000 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 the recognition of death benefits during the second half of 2024, as well as a $161,000 increase in earnings on annuities purchased in the fourth quarter of 2024. The increases were partially offset by a decrease in debit card fees of $30,000, or 3.5% during the year ended December 31, 2024 when compared to the year ended December 31, 2023.

***Non-Interest Expense.*** Non-interest expense was $20.0 million for the year ended December 31, 2024, a decrease of $1.8 million, or 8.4%, as compared to $21.8 million for the year ended December 31, 2023. The decrease primarily related to a decline in professional services expenses of $1.0 million, or 41.8%, as a result of a decrease in the use of external consultants who assisted with regulatory compliance in connection with the former consent order. Advertising costs decreased by $484,000, or 83.7%, due to a decrease in marketing spending, and FDIC insurance expense decreased by $317,000, or 28.5%, during the year ended December 31, 2024 due to a decrease in premium assessments. Additionally, occupancy and equipment costs decreased by $194,000, or 6.7%, as the result of efforts to optimize operating expenses. These decreases were partially offset by an increase in salaries and employee benefits expense of $198,000, or 1.8%, in an effort to attract and retain personnel as well as an increase in data processing costs of $41,000, or 2.3%, primarily related to our core provider for the year ended December 31, 2024 when compared to the year ended December 31, 2023.

***Income Taxes Expense.*** Income tax expense was $935,000 for the year ended December 31, 2024, a decrease of $464,000, or 33.2%, as compared to $1.4 million for the year ended December 31, 2023. The decrease in income tax expense was primarily due to the restructuring of bank-owned life insurance in 2023, which resulted in additional taxable income in 2023 and an increase in non-taxable income in 2024 as the result of higher earnings on policies owned. The effective tax rate for the years ended December 31, 2024 and 2023 was 16.0% and 22.4%, respectively. The decrease in the effective tax rate in 2024 was due to the aforementioned restructuring of 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, 2024, the maximum amount that we could borrow from the FHLBNY, based on the market value of certain fixed-rate residential, one- to four-family loans pledged to FHLBNY, was $26.7 million, which was collateralized by certain fixed-rate residential, one- to four-family loans in delivery. Under this arrangement, we could significantly increase our maximum borrowing capacity by providing additional eligible collateral in delivery. At December 31, 2024 and December 31, 2023, we had outstanding advances under this agreement of $10.3 million and $35.3 million, respectively. 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, 2024 and December 31, 2023, there were no securities pledged to the Federal Reserve Bank and we had no balances outstanding. We have also established an unsecured line of credit with a correspondent bank for $20.0 million. There were no borrowings outstanding on this line as of December 31, 2024 and December 31, 2023.

As a result of our previous Consent Order, our ability to access available sources of funds from the FHLBNY had been curtailed to short-term advances (i.e., 30 days or less) and the residential loans pledged as collateral for these borrowings were subject to reductions in value as of December 31, 2024. On January 8, 2025, the FHLBNY communicated that the Bank was no longer restricted and therefore would be able to access additional borrowing capacity based on the total eligible population of fixed-rate residential, one- to four-family loans pledged as collateral and would no longer be curtailed to short-term advances. As of January 31, 2025, we had available borrowing capacity of $86.9 million based on the eligible collateral pledged. Lastly, on February 27, 2025, the Federal Reserve Bank approved the Bank's application for uncollateralized intraday credit with an effective date of March 6, 2025. With this uncollateralized intraday credit, certain transactions will not be rejected for which there are insufficient funds in our Federal Reserve Master Account during normal hours of operation.

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, 2024, we originated loans of approximately $53.3 million as compared to approximately $56.3 million of loans originated during the year ended December 31, 2023. Principal repayments and other deductions exceeded loan originations in 2024 by $12.0 million. There were no purchases of investment securities during the years ended December 31, 2024 or December 31, 2023. We did not sell any investment securities during the year ended December 31, 2024 and sold investment securities with an amortized cost of $9.8 million during the year ended December 31, 2023. Additionally, during 2024, we purchased $3.0 million in annuity assets in connection with the implementation of a supplemental executive retirement plan. These activities for 2023 and 2024 were funded primarily through a combination of organic deposit growth, principal payments received on loans and securities, securities sales, borrowings, and cash reserves.

We have 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. We believe we have sufficient funds to fulfill these commitments, including sources of funds available through the use of FHLBNY advances or other liquidity sources. Total deposits were $573.0 million at December 31, 2024 as compared to $590.9 million at December 31, 2023. Approximately $182.0 million of time deposit accounts are scheduled to mature within one year as of December 31, 2024. 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 FHLBNY, 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, including additional borrowings from the FHLBNY, in the future.

We do not anticipate any material capital expenditures in 2025. We do not have any balloon or other payments due on any long-term obligations, other than the borrowing agreements noted above. At December 31, 2024, the Bank exceeded all of its regulatory capital requirements.

**Off-Balance Sheet Arrangements**

Our off-balance sheet items include loan commitments as described in Note 16 in the Notes to our Audited Consolidated Financial Statements. At December 31, 2024, we had loan commitments to borrowers of approximately $3.1 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 $97.5 million. We recorded an allowance for credit losses associated with these commitments of $314,000 as of December 31, 2024. 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 Polices, 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 that may affect our financial condition and results of operations.

**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 – 49 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, 2024. 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, 2024, 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, 2024 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 2024, 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 2025 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days of our December 31, 2024 fiscal year end.

**Item 11. Executive Compensation.**

The information required by this item is incorporated herein by reference to our Proxy Statement for our 2025 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days of our December 31, 2024 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 2025 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days of our December 31, 2024 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 2025 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days of our December 31, 2024 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 2025 Annual Meeting of Stockholders, which will be filed with the Securities and Exchange Commission within 120 days of our December 31, 2024 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
- Report of Predecessor Auditor
- Consolidated Statements of Financial Condition as of December 31, 2024 and 2023
- Consolidated Statements of Income for the years ended December 31, 2024 and 2023
- Consolidated Statements of Comprehensive Income for the years ended December 31, 2024 and 2023
- Consolidated Statements of Stockholders' Equity for the years ended December 31, 2024 and 2023
- Consolidated Statements of Cash Flows for the years ended December 31, 2024 and 2023
- 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 | Charter of Lake Shore Bancorp, Inc.[1] |
| 3.2 | Amended and Restated Bylaws of Lake Shore Bancorp, Inc.[2] |
| 4.1 | Form of Stock Certificate of Lake Shore Bancorp, Inc.[3] |
| 4.2 | Form of Stock Option Certificate[4] |
| 4.3 | Description of Common Stock[5] |
| 10.1 | Amended and Restated Severance Pay Plan of Lake Shore Savings Bank[6] |
| 10.2 | 2015 Executives Supplemental Benefit Plan I[7] |
| 10.3 | Amended and Restated 2015 Executives Supplemental Benefit Plan II[8] |
| 10.4 | Lake Shore Bancorp, Inc. 2025 Equity Incentive Plan[9] |
| 10.5 | Amended and Restated 2015 Directors Supplemental Benefit Plan II[10] |
| 10.6 | Lake Shore Bancorp, Inc. 2006 Stock Option Plan[11] |
| 10.7 | Employment Agreement, dated as of December 16, 2024, by and between Lake Shore Savings Bank and Kim C. Liddell[12] |
| 10.8 | Supplemental Executive Retirement Plan Agreement, dated as of December 16, 2024, between Lake Shore Savings Bank and Kim C. Liddell[13] |
| 10.9 | 2015 Executives Supplemental Benefit Plan II joinder agreement for Jeffery M. Werdein[14] |
| 10.10 | Lake Shore Bancorp, Inc. 2012 Equity Incentive Plan[15] |
| 10.11 | Retention Agreement between Lake Shore Savings Bank and Jeffrey Werdein[16] |
| 10.12 | Employment Agreement, dated as of March 11, 2025, by and between Lake Shore Savings Bank and Taylor M. Gilden[17] |
| 10.13 | Amended and Restated Plan of Conversion and Reorganization of Lake Shore, MHC[18] |
| 10.14 | Lake Shore Savings Bank Annual Incentive Plan* |
| 19.1 | Lake Shore Bancorp, Inc. Lake Shore Savings Bank Statement of Company Policy Regarding Confidential Information and Stock and Securities Trading By Directors, Officers and Employees* |
| 21.1 | Subsidiaries of Lake Shore Bancorp, Inc.* |
| 23.1 | Consent of Yount, Hyde & Barbour, P.C.* |
| 23.2 | Consent of Baker Tilly US, LLP* |
| 31.1 | Certification by the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002* |
| 31.2 | Certification by the Chief Financial Officer Pursuant to Section 302 of the Sarbanes- Oxley Act of 2002* |
| 32.1 | 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* |
| 32.2 | 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* |
| 97 | Policy Relating to Recovery of Erroneously Awarded Compensation* |
| 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 Appendix A to the Proxy Statement for our February 4, 2025 special meeting of stockholders filed with the Securities and Exchange Commission on December 20, 2024.

[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 stockholders filed with the Securities and Exchange Commission on September 7, 2006.

[12] Incorporated herein by reference to Exhibit 10.1 to Form 8-K, filed with the Securities and Exchange Commission on December 20, 2024.

[13] Incorporated herein by reference to Exhibit 10.2 to Form 8-K, filed with the Securities and Exchange Commission on December 20, 2024.

[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 March 14, 2025.

[18] Incorporated herein by reference to Exhibit 2.1 to Form 8-K, filed with the Securities and Exchange Commission on March 14, 2025.

## 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 14, 2025.

**Lake Shore Bancorp, Inc.**
By:/s/ Kim C. Liddell
Kim C. Liddell
President and Chief Executive Officer
Date: March 14, 2025

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 |
|---|---|---|
| **/s/ Kim C. Liddell** | **President and Chief Executive Officer (Principal Executive Officer)** | **March 14, 2025** |
| **Kim C. Liddell** | | |
| **/s/ Kevin M. Sanvidge** | **Chairman of the Board** | **March 14, 2025** |
| **Kevin M. Sanvidge** | | |
| **/s/ Sharon E. Brautigam** | **Vice Chairperson of the Board** | **March 14, 2025** |
| **Sharon E. Brautigam** | | |
| **/s/ Michelle M. DeBergalis** | **Director** | **March 14, 2025** |
| **Michelle M. DeBergalis** | | |
| **/s/ John P. McGrath** | **Director** | **March 14, 2025** |
| **John P. McGrath** | | |
| **/s/ Jack L. Mehltretter** | **Director** | **March 14, 2025** |
| **Jack L. Mehltretter** | | |
| **/s/ Ronald J. Passafaro** | **Director** | **March 14, 2025** |
| **Ronald J. Passafaro** | | |
| **/s/ Ann M. Segarra** | **Director** | **March 14, 2025** |
| **Ann M. Segarra** | | |
| **/s/ Taylor M. Gilden** | **Chief Financial Officer and Treasurer (Principal Financial and Accounting Officer)** | **March 14, 2025** |
| **Taylor M. Gilden** | | |

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## Report of Independent Registered Public Accounting Firm

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

**Opinion on the Financial Statements**

We have audited the accompanying consolidated statement of financial condition of Lake Shore Bancorp, Inc. and Subsidiary (the Company) as of December 31, 2024, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for the year then ended, and the related notes (collectively, the financial statements). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2024, and the results of its operations and its cash flows for the year then ended in conformity with accounting principles generally accepted in the United States of America.

**Basis for Opinion**

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

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audit, 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 audit included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audit also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audit provides 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 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 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 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 – Collectively Evaluated Loans**

**Description of the Matter**

As further described in Note 2 (Summary of Significant Accounting Policies) and Note 5 (Allowance for Credit Losses) to the consolidated financial statements, the allowance for credit losses on loans is a valuation allowance that represents management's best estimate of expected credit losses on loans measured at amortized cost considering available information relevant to assessing collectability over the loans' contractual terms. Loans which share common risk characteristics are pooled and collectively evaluated by the Company using historical data, as well as assessments of current conditions and reasonable and supportable forecasts of future conditions. The Company's allowance for credit losses on loans related to collectively evaluated loans totaled $5.13 million, which represented the full amount of the allowance recorded as of December 31, 2024. The collectively evaluated allowance for credit losses consists of quantitative and qualitative components.

The quantitative component consists of loss estimates derived from a vintage model approach. 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. The calculated loss percentages are then applied to the remaining outstanding balances for each vintage year, for the estimated remaining life of the loans in the loan segment. These estimates consider large amounts of data in tabulating significant inputs to the calculations. In addition to the quantitative component, the collectively evaluated allowance for credit losses on loans also includes a qualitative component which aggregates management's assessment of available information relevant to assessing collectability that is not captured in the quantitative loss estimation process. Factors considered by management in developing its qualitative estimates include: trends in the nature and volume of the 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 qualitative component incorporates forecasts of unemployment data and changes in gross domestic production to further adjust the quantitative estimate of losses. This evaluation is inherently subjective as it requires estimates that are susceptible to significant revision as more information becomes available.

Management exercised significant judgment when estimating the allowance for credit losses on collectively evaluated loans. We identified the estimation of the collectively evaluated allowance for credit losses on loans as a critical audit matter, as auditing the estimate involved especially complex and subjective auditor judgment in evaluating management's assessment of the inherently subjective estimates.

**How We Addressed the Matter in Our Audit**
The primary audit procedures we performed to address this critical audit matter included:

- Obtaining an understanding of the Company's process for determining its allowance on collectively evaluated loans, including the underlying methodology and significant inputs to the calculation.
- Substantively testing management's process for measuring the collectively evaluated allowance for credit losses, including:
- Evaluating the conceptual soundness of the methodology for determining the collectively evaluated allowance for credit losses.
- Testing significant inputs to the calculation, including historical losses and loan data.
- Evaluating the pool of collectively evaluated loans for completeness.
- Evaluating management's determination of the qualitative adjustments, including evaluating data on which the qualitative adjustments were based as well as the relative magnitude of the adjustments and the completeness and accuracy of the data utilized.
- Testing the mathematical accuracy of the allowance for credit losses for collectively evaluated loans, including calculation of the underlying quantitative component as well as application of qualitative factors to the collectively evaluated loan balances.

/s/ Yount, Hyde & Barbour, P.C.

We have served as the Company's auditor since 2024.

Winchester, Virginia
March 14, 2025

# 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 statement of financial condition of Lake Shore Bancorp, Inc. and Subsidiary (Company) as of December 31, 2023, the related consolidated statements of income, comprehensive income, stockholders' equity, and cash flows for the year 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 the results of its operations and its cash flows for the year then ended, in conformity with accounting principles generally accepted in the United States of America.

**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 audit. 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 audit 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. Our audit of the financial statements 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 audit 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 audit provides a reasonable basis for our opinion.

/s/ Baker Tilly US, LLP

We have served as the Company's auditor from 2005 to 2024.

Pittsburgh, Pennsylvania
March 22, 2024

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

| | December 31, 2024 | December 31, 2023 |
|---|---|---|
| | (Dollars in thousands, except share data) | |
| **Assets** | | |
| Cash and due from banks | $ 2,710 | $ 4,648 |
| Interest earning deposits | 30,421 | 49,082 |
| Cash and Cash Equivalents | 33,131 | 53,730 |
| Securities, at fair value | 56,495 | 60,442 |
| Federal Home Loan Bank stock, at cost | 1,157 | 2,293 |
| Loans receivable, net of allowance for credit losses of $5,133 in 2024 and $6,463 in 2023 | 544,620 | 555,828 |
| Premises and equipment, net | 7,218 | 7,870 |
| Accrued interest receivable | 2,819 | 2,835 |
| Bank-owned life insurance | 29,340 | 29,355 |
| Other assets | 10,724 | 12,765 |
| **Total Assets** | $ 685,504 | $ 725,118 |
| **Liabilities and Stockholders' Equity** | | |
| **Liabilities** | | |
| Deposits: | | |
| Interest bearing | $ 476,566 | $ 495,738 |
| Non-interest bearing | 96,412 | 95,186 |
| Total Deposits | 572,978 | 590,924 |
| Long-term debt | 10,250 | 35,250 |
| Advances from borrowers for taxes and insurance | 3,225 | 3,307 |
| Other liabilities and accrued interest payable | 9,183 | 9,364 |
| **Total Liabilities** | 595,636 | 638,845 |
| **Commitments and Contingencies** | | |
| **Stockholders' Equity** | | |
| Common stock, $0.01 par value per share, 25,000,000 shares authorized; 6,836,514 shares issued and 5,735,226 shares outstanding at December 31, 2024 and 6,836,514 shares issued and 5,686,288 shares outstanding at December 31, 2023 | 68 | 68 |
| Additional paid-in capital | 31,512 | 31,456 |
| Treasury stock, at cost (1,101,288 shares at December 31, 2024 and 1,150,226 shares at December 31, 2023) | (13,304) | (13,760) |
| Unearned shares held by ESOP | (938) | (1,023) |
| Unearned shares held by compensation plans | (311) | (39) |
| Retained earnings | 82,805 | 78,956 |
| Accumulated other comprehensive loss | (9,964) | (9,385) |
| **Total Stockholders' Equity** | 89,868 | 86,273 |
| **Total Liabilities and Stockholders' Equity** | $ 685,504 | $ 725,118 |

*See notes to consolidated financial statements.*

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

| | Years Ended December 31, 2024 | 2023 |
|---|---|---|
| | (Dollars in thousands, except per share data) | |
| **Interest Income** | | |
| Loans, including fees | $ 30,713 | $ 30,009 |
| Investment securities, taxable | 765 | 898 |
| Investment securities, tax-exempt | 866 | 1,043 |
| Interest-earning deposits & federal funds sold | 2,460 | 1,805 |
| **Total Interest Income** | 34,804 | 33,755 |
| **Interest Expense** | | |
| Deposits | 13,077 | 8,069 |
| Short-term borrowings | — | 87 |
| Long-term debt | 621 | 1,191 |
| Finance lease | 43 | 50 |
| **Total Interest Expense** | 13,741 | 9,397 |
| **Net Interest Income** | 21,063 | 24,358 |
| **(Credit) Provision for Credit Losses** | (1,479) | (1,043) |
| **Net Interest Income After (Credit) Provision for Credit Losses** | 22,542 | 25,401 |
| **Non-Interest Income** | | |
| Service charges and fees | 1,104 | 1,045 |
| Debit card fees | 816 | 846 |
| Earnings on bank-owned life insurance | 1,074 | 761 |
| Unrealized gain on equity securities | 54 | 11 |
| Unrealized loss on interest rate swap | — | (58) |
| Recovery on previously impaired investment securities | 6 | 7 |
| Loss on sale of securities available for sale | — | (59) |
| Earnings on annuity assets | 161 | — |
| Other | 89 | 82 |
| **Total Non-Interest Income** | 3,304 | 2,635 |
| **Non-Interest Expense** | | |
| Salaries and employee benefits | 11,452 | 11,254 |
| Occupancy and equipment | 2,717 | 2,911 |
| Professional services | 1,449 | 2,489 |
| Data processing | 1,786 | 1,745 |
| Telephone and communications | 434 | 407 |
| Advertising | 94 | 578 |
| FDIC insurance | 796 | 1,113 |
| Postage and supplies | 276 | 261 |
| Other | 976 | 1,059 |
| **Total Non-Interest Expense** | 19,980 | 21,817 |
| **Income before Income Taxes** | 5,866 | 6,219 |
| **Income Tax Expense** | 935 | 1,399 |
| **Net Income** | $ 4,931 | $ 4,820 |
| **Basic and diluted earnings per common share** | $ 0.88 | $ 0.82 |
| **Dividends declared per share** | $ 0.54 | $ — |

*See notes to consolidated financial statements.*

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

| | Years Ended December 31, 2024 | 2023 |
|---|---|---|
| | (Dollars in thousands) | |
| **Net Income** | $ 4,931 | $ 4,820 |
| Other Comprehensive Income, net of tax benefit (expense): | | |
| Unrealized holding (losses) gains on securities available for sale, net of tax benefit (expense) | (574) | 905 |
| Reclassification adjustments related to: | | |
| Recovery on previously impaired investment securities included in net income, net of tax expense | (5) | (5) |
| Net loss on sale of securities included in net income, net of tax benefit | — | 47 |
| **Total Other Comprehensive (Loss) Income** | (579) | 947 |
| **Total Comprehensive Income** | $ 4,352 | $ 5,767 |

*See notes to consolidated financial statements.*

# Lake Shore Bancorp, Inc. and Subsidiary
# Consolidated Statements of Stockholders' Equity
### Years Ended December 31, 2024 and 2023

| | 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) | | | | |
| **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** | $ 68 | $ 31,456 | $ (13,760) | $ (1,023) | $ (39) | $ 78,956 | $ (9,385) | $ 86,273 |

| | 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 per share data) | | | | |
| **Balance - January 1, 2024** | $ 68 | $ 31,456 | $ (13,760) | $ (1,023) | $ (39) | $ 78,956 | $ (9,385) | $ 86,273 |
| Net income | — | — | — | — | — | 4,931 | — | 4,931 |
| Other comprehensive loss, net of tax benefit of $153 | — | — | — | — | — | — | (579) | (579) |
| ESOP shares earned (7,935 shares) | — | 14 | — | 85 | — | — | — | 99 |
| Compensation plan shares granted (52,252 shares) | — | — | 491 | — | (491) | — | — | — |
| Compensation plan shares forfeited (1,644 shares) | — | — | (15) | — | 15 | — | — | — |
| Compensation plan shares earned, net of forfeitures (21,720 shares) | — | 42 | — | — | 204 | — | — | 246 |
| Cash dividends declared ($0.54 per share) | — | — | — | — | — | (1,082) | — | (1,082) |
| Common stock repurchased on vesting for payroll taxes (1,670 shares) | — | — | (20) | — | — | — | — | (20) |
| **Balance - December 31, 2024** | $ 68 | $ 31,512 | $ (13,304) | $ (938) | $ (311) | $ 82,805 | $ (9,964) | $ 89,868 |

*See notes to consolidated financial statements.*

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

| | Years Ended December 31, 2024 | 2023 |
|---|---|---|
| | (Dollars in thousands) | |
| **CASH FLOWS FROM OPERATING ACTIVITIES** | | |
| Net income | $ 4,931 | $ 4,820 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | |
| Net amortization of investment securities | 72 | 60 |
| Net amortization of deferred loan costs | 496 | 552 |
| (Credit) provision for credit losses | (1,479) | (1,043) |
| Recovery on previously impaired investment securities | (6) | (7) |
| Unrealized gain on equity securities | (54) | (11) |
| Unrealized loss on interest rate swap | — | 58 |
| Loss on sale of investment securities | — | 59 |
| Depreciation of premises and equipment | 739 | 807 |
| Increase in cash surrender value of bank-owned life insurance | (1,074) | (761) |
| Earnings on annuity assets | (161) | — |
| ESOP shares committed to be released | 99 | 86 |
| Stock based compensation expense | 246 | 17 |
| Decrease (increase) in accrued interest receivable | 16 | (39) |
| (Increase) decrease in other assets | (1,419) | 534 |
| Impairment of foreclosed real estate | — | 16 |
| Loss (gain) on sale of foreclosed real estate | 19 | (15) |
| Gain on sale of premises and equipment | (14) | — |
| Deferred income tax expense | 128 | 17 |
| (Decrease) increase in other liabilities | (31) | 1,055 |
| **Net Cash Provided by Operating Activities** | 2,508 | 6,205 |
| **CASH FLOWS FROM INVESTING ACTIVITIES** | | |
| Activity in debt securities: | | |
| Sales | — | 9,719 |
| Maturities, prepayments and calls | 3,203 | 3,983 |
| Purchases of Federal Home Loan Bank of New York Stock | — | (1,314) |
| Redemptions of Federal Home Loan Bank of New York Stock | 1,136 | 1,351 |
| Proceeds from the surrender of and claim on Bank owned life insurance | 7,674 | 635 |
| Purchase of annuity assets | (3,000) | — |
| Loan principal collections and originations, net | 12,020 | 17,858 |
| Purchase of bank-owned life insurance | — | (12,596) |
| Proceeds from sale of interest rate swaps | — | 214 |
| Proceeds from sale of foreclosed real estate | 42 | 64 |
| Net sale (purchases) of premises and equipment | 41 | (391) |
| **Net Cash Provided by Investing Activities** | 21,116 | 19,523 |
| **CASH FLOWS FROM FINANCING ACTIVITIES** | | |
| Net (decrease) increase in deposits | (17,946) | 20,805 |
| Net decrease in advances from borrowers for taxes and insurance | (82) | (1) |
| Net decrease in short-term borrowings | — | (12,596) |
| Proceeds from issuance of long-term debt | — | 15,250 |
| Repayment of long-term debt | (25,000) | (4,950) |
| Repayment of finance lease obligation | (93) | (81) |
| Purchase of treasury stock | (20) | (58) |
| Cash dividends paid | (1,082) | — |
| **Net Cash (Used in) Provided by Financing Activities** | (44,223) | 18,369 |
| **Net (Decrease) Increase in Cash and Cash Equivalents** | (20,599) | 44,097 |
| **CASH AND CASH EQUIVALENTS - BEGINNING** | 53,730 | 9,633 |
| **CASH AND CASH EQUIVALENTS - ENDING** | $ 33,131 | $ 53,730 |
| **SUPPLEMENTARY CASH FLOWS INFORMATION** | | |
| Interest paid | $ 14,471 | $ 8,634 |
| Income taxes paid | $ 1,115 | $ 1,321 |
| **SUPPLEMENTARY SCHEDULE OF NONCASH INVESTING AND FINANCING ACTIVITIES** | | |
| Accrued purchase of property and equipment | $ 114 | $ — |
| Right-of-use lease liabilities arising from obtaining right-of-use lease assets | $ 852 | $ — |
| Life insurance receivable | $ — | $ 6,585 |
| Foreclosed real estate acquired in settlement of loans | $ — | $ 60 |

*See notes to consolidated financial statements.*

**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 63.4% of the Company’s outstanding common stock as of December 31, 2024. As of December 31, 2024, the MHC elected to waive dividends of approximately $20.6 million on a cumulative basis. The dividends waived by the MHC are considered a restriction on the retained earnings of the Company.

On January 27, 2025, the Board of Directors of the MHC adopted a Plan of Conversion and Reorganization pursuant to which the MHC will undertake a "second-step" conversion and Lake Shore Savings Bank, the wholly-owned subsidiary of Lake Shore Bancorp, will reorganize from the two-tier mutual holding company structure to the fully-public stock holding company structure. Refer to Note 21 - Subsequent Events for more information.

*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, the wholly-owned 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 ten 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”) and to general practices within the banking industry. Certain prior periods amounts have been reclassified to conform to the current presentation. These reclassifications had no effect on 2023 net income or stockholders' equity.

### 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 deterioration 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 $254,000 and $260,000 as of December 31, 2024 and 2023, respectively, on available for sale debt securities is included in accrued interest receivable on the consolidated statements of financial condition and is excluded from the allowance for credit losses estimation process.

**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.

Charge-offs are recorded as a reduction to the allowance for credit losses for loans when amounts are deemed uncollectible. When losses are confirmed through the receipt of assets in satisfaction of a loan, such as the underlying collateral upon foreclosure or cash upon completion of a short sale, a charge-off is recorded in an amount equal to the excess of a loan's amortized cost over the fair value of assets received. Subsequent recoveries of charged-off loans, if any, are credited to the allowance for credit losses on loans.

**Allowance for Credit Losses – Loans**

The allowance for credit losses is a valuation allowance that is deducted from 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 (credit to) or provision for 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 Company'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. The Company considers several factors in its determination of whether to classify loans as collateral-dependent and individually evaluate such loans, including the nature and size of the loan, its repayment status, and whether any modifications have occurred as a result of the borrower experiencing financial difficulty. When loans are considered to be collateral-dependent, 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 both December 31, 2024 and 2023 is included in accrued interest receivable on the consolidated statements of financial condition and is excluded from the allowance for credit losses estimation process.

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 (credit to) or provision for 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 a 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.

**Revenue Recognition**

The majority of the Company's revenue-generating transactions are not subject to ASC 606 "Revenue from Contracts with Customers", including revenue generated from financial instruments, such as loans, letters of credit, and investment securities, as well as revenue related to mortgage servicing activities, as these activities are subject to other accounting standards. Descriptions of the Company's revenue-generating activities that are within the scope of ASC 606, which are presented in the Company's consolidated statements of income as components of non-interest income are discussed further in Note 20 - Revenue Recognition.

**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 credit 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 $0 and $34,000 at December 31, 2024 and 2023, 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, 2024 and 2023 were $42,000 and $64,000, respectively. This resulted in a net loss on sale of $19,000 and gain on sale of $15,000 for the years ended December 31, 2024 and 2023, respectively, and was included as a component of other non-interest expense in the consolidated statements of income.

**Bank Owned Life Insurance and Annuity Assets**

The Company invests in bank owned life insurance ("BOLI") and annuity assets as sources of funding for employee benefit obligations described below and in Note 11 - Employee and Director Benefit Plans.

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 and gains resulting from death benefit claims are included in non-interest income in the consolidated statements of income and is not subject to income taxes. Income from the increase in the cash surrender value is only subject to income taxes upon surrender. The Company does not intend to surrender the policies held at December 31, 2024, 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 $29.3 million at December 31, 2024 and $29.4 million at December 31, 2023.

Annuity assets involve the purchase of future cash flow streams by the Company to directly fund the payment of a certain supplemental executive retirement plan. Income from the increase in the value of the underlying annuity contracts are included in non-interest income on the consolidated statements of income. The value of annuity assets were $3.2 million and $0 as of December 31, 2024 and 2023, respectively, and were included within other assets on the Company's consolidated statements of financial condition.

**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, 2024 and 2023 was $94,000 and $578,000, 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-based Compensation Plans**

At December 31, 2024, the Company had stock-based 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 requisite 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.

**Supplemental Employee and Director Benefit Plans**

The Company maintains a 401(k) savings plan for its employees and has certain non-qualified supplemental executive retirement plans for its directors and certain members of management. Refer to Note 11 - Employee and Director Benefit Plans for additional information.

**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, 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. Refer to Note 16 - Commitments to Extend Credit for additional information.

**Comprehensive Income**

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 Contingencies**

Loss contingencies, including claims and legal actions arising in the ordinary course of business, are recorded as liabilities when the likelihood of loss is probable and an amount or range of loss can be reasonably estimated. The Company does not believe such matters exist that will have a material effect on the financial statements.

**Segment Reporting**

The Company has one reporting unit, one operating segment and, consequently, a single reportable segment. The Chief Executive Officer, who is the Company's chief operating decision maker, or CODM, monitors revenue streams and other information provided about the company's products and services offered, expenses, operating metrics, and other financial metrics. The information provided to the CODM is presented on an aggregated entity-level basis, which is consistent with the accompanying Consolidated Financial Statements presented in this Form 10-K. In assessing operating results and in allocating resources, the CODM evaluates the financial performance of the Company's business by evaluating revenue streams, significant expenses, and budget to actual results, among other things. Profitability is only determined at the entity level. The CODM uses revenue streams to evaluate product pricing and significant expenses to assess performance and evaluate return on assets and equity. The CODM uses consolidated net income, among other metrics, to benchmark the Company against its competitors. The benchmarking analysis, coupled with monitoring of budget to actual results, are used in assessing performance and allocating resources. Loans, investments, interest-earning deposits, and non-interest income provide the revenues in the Company's operation. Interest expense, (credit) provisions for credit losses, and non-interest expense provide the significant expenses in the Company's operations. All of the Company's income and expenses are included in the accompanying Consolidated Financial Statements presented in this Form 10-K. All of the Company's operations are domestic.

**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.

The Company adopted ASU 2023-07 "*Segment Reporting (Topic 280) - Improvement to Reportable Segment Disclosures*" on January 1, 2024. The Company has determined that all of its operations represent a single operating segment, as discussed above. The CODM regularly assesses performance of the single operating and reporting segment and decides how to allocate resources based on net income reported in the Company's consolidated statements of income and comprehensive income. The CODM is also regularly provided with expense information at a level consistent with that disclosed in the Company's consolidated statements of income and comprehensive income.

**Recent Accounting Standards Not Yet Adopted**

In December 2023, the FASB issued ASU 2023-09, "Income Taxes (Topic 740): Improvements to Income Tax Disclosures." The amendments in this ASU require an entity to disclose specific categories in the rate reconciliation and provide additional information for reconciling items that meet a quantitative threshold, which is greater than five percent of the amount computed by multiplying pretax income by the entity's applicable statutory rate, on an annual basis. Additionally, the amendments in this ASU require an entity to disclose the amount of income taxes paid (net of refunds received) disaggregated by federal, state, and foreign taxes and the amount of income taxes paid (net of refunds received) disaggregated by individual jurisdictions that are equal to or greater than five percent of total income taxes paid (net of refunds received). Lastly, the amendments in this ASU require an entity to disclose income (or loss) from continuing operations before income tax expense (or benefit) disaggregated between domestic and foreign and income tax expense (or benefit) from continuing operations disaggregated by federal, state, and foreign. This ASU is effective for annual periods beginning after December 15, 2024. Early adoption is permitted. The amendments should be applied on a prospective basis; however, retrospective application is permitted. The Company does not expect the adoption of ASU 2023-09 to have a material impact on its consolidated financial statements.

In November 2024, the FASB issued ASU 2024-03, "Income Statement - Reporting Comprehensive Income - Expense Disaggregation Disclosures (Subtopic 220-40)." The amendments in this ASU require a public business entity to disclose additional information about specific expense categories in the notes to the financial statements at interim and annual reporting periods, including employee compensation, depreciation, intangible asset amortization, and other costs and expenses. Additionally, a public business entity must disclose a qualitative description of the amounts remaining in relevant expense captions which are not separately disaggregated quantitatively under the amendments included within this ASU. This ASU is effective for annual periods beginning after December 15, 2026 and interim periods beginning after December 15, 2027. Early adoption of this ASU is permitted and may be applied prospectively to financial statements issued for reporting periods after the effective date of the ASU or retrospectively to any period presented in the financial statements.

The Company does not expect the adoption of ASU 2024-03 to have a material impact on its consolidated financial statements.

## Note 3 – Investment Securities

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

| | December 31, 2024 | | | |
|---|---|---|---|---|
| | Amortized Cost | Gross Unrealized Gains | Gross Unrealized Losses | Fair Value |
| | (Dollars in thousands) | | | |
| **SECURITIES** | | | | |
| *Debt Securities Available for Sale* | | | | |
| U.S. government agencies | $ 2,006 | $ — | $ (155) | 1,851 |
| Municipal bonds | 40,719 | — | (8,431) | 32,288 |
| Mortgage-backed securities: | | | | |
| Collateralized mortgage obligations-private label | 9 | — | — | 9 |
| Collateralized mortgage obligations-government sponsored entities | 10,201 | — | (1,259) | 8,942 |
| Government National Mortgage Association | 54 | — | (4) | 50 |
| Federal National Mortgage Association | 10,812 | — | (1,799) | 9,013 |
| Federal Home Loan Mortgage Corporation | 5,229 | — | (989) | 4,240 |
| Asset-backed securities-private label | — | 28 | — | 28 |
| Asset-backed securities-government sponsored entities | 1 | — | — | 1 |
| *Total Debt Securities Available for Sale* | 69,031 | 28 | (12,637) | 56,422 |
| *Equity Securities* | 22 | 51 | — | 73 |
| Total Securities | $ 69,053 | $ 79 | $ (12,637) | $ 56,495 |

| | 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 |

*Debt Securities*

All of the Company's collateralized mortgage obligations are backed by one- to four-family residential mortgages.

At December 31, 2024 and December 31, 2023, eighteen municipal bonds with an amortized cost of $6.2 million and fair value of $4.6 million and sixteen municipal bonds with an amortized cost of $4.9 million and fair value of $3.7 million, respectively, were pledged as collateral for customer deposits in excess of the Federal Deposit Insurance Corporation ("FDIC") insurance limits. At December 31, 2024 and 2023, no securities were pledged as collateral to the Federal Reserve Bank ("FRB") or the FHLB.

The following table sets forth the Company's investment in available for sale debt 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, 2024** | | | | | | |
| U.S. government agencies | $ — | $ — | $ 1,851 | $ (155) | $ 1,851 | $ (155) |
| Municipal bonds | 371 | (9) | 31,917 | (8,422) | 32,288 | (8,431) |
| Mortgage-backed securities | 86 | (1) | 22,168 | (4,050) | 22,254 | (4,051) |
| | $ 457 | $ (10) | $ 55,936 | $ (12,627) | $ 56,393 | $ (12,637) |
| **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) |
| | $ 6,570 | $ (1,067) | $ 53,704 | $ (10,847) | $ 60,274 | $ (11,914) |

As of December 31, 2024, the Company's investment portfolio included seven debt securities in the "unrealized losses less than twelve months" category and 169 debt securities in the "unrealized losses twelve months or more" category. As of December 31, 2023, the Company's investment portfolio included 23 debt securities in the "unrealized losses less than twelve months" category and 150 debt securities in the "unrealized losses twelve months or more" category.

As of December 31, 2024, the Company had 176 debt securities with a fair value of $56.4 million in an unrealized loss position. As of December 31, 2023, the Company had 173 debt securities with a fair value of $60.3 million in an unrealized loss position. The Company reviews securities in an unrealized loss position to evaluate credit risk. The Company considers payment history, risk ratings from external parties, financial statements for municipal and corporate securities, public statements from issuers, and other available credible published sources in evaluating credit risk. No credit risk was found and no allowance for credit losses on securities available for sale was recorded as of December 31, 2024 or December 31, 2023. The unrealized losses are attributed to noncredit-related factors including changes in interest rates and other market conditions. The Company does not have the intent to sell any of these securities and believes that it is more likely than not that the Company will not have to sell any such securities before a recovery of cost. The contractual terms of the investments do not permit the issuers to settle the securities at a price less than the cost basis of the investments. The fair value is expected to recover as the securities approach their maturity date or repricing date or if market yields for such investments decline.

Accrued interest of $254,000 as of December 31, 2024 and $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.

During the year ended December 31, 2024, the Company did not sell any debt securities. During the year 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.

Scheduled contractual maturities of debt securities are as follows:

| | Amortized Cost | Fair Value |
|---|---|---|
| | (Dollars in thousands) | |
| **December 31, 2024:** | | |
| Less than one year | $ — | $ — |
| After one year through five years | 2,086 | 1,965 |
| After five years through ten years | 10,757 | 9,394 |
| After ten years | 29,882 | 22,780 |
| Mortgage-backed securities | 26,305 | 22,254 |
| Asset-backed securities | 1 | 29 |
| Total Debt Securities | $ 69,031 | $ 56,422 |

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, 2024 and 2023, equity securities consisted of 22,368 shares of Federal Home Loan Mortgage Corporation ("FHLMC") common stock. During the years ended December 31, 2024 and 2023, the Company recognized an unrealized gain of $54,000 and $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, 2024 and 2023.

## Note 4 - Loans Receivable

Loans receivable, net consists of the following:

| | December 31, 2024 | December 31, 2023 |
|---|---|---|
| | **(Dollars in thousands)** | |
| Real Estate Loans: | | |
| Residential, one- to four-family (1) | $ 161,331 | $ 172,005 |
| Home Equity | 47,456 | 51,869 |
| Commercial (2) | 320,984 | 316,986 |
| Total real estate loans | 529,771 | 540,860 |
| Other Loans: | | |
| Commercial | 15,728 | 16,546 |
| Consumer(3) | 991 | 1,130 |
| Total gross loans | 546,490 | 558,536 |
| Net deferred loan costs | 3,263 | 3,755 |
| Allowance for credit losses on loans | (5,133) | (6,463) |
| Loans receivable, net | $ 544,620 | $ 555,828 |

(1) Includes one- to four-family construction loans of $0 and $466,000 as of December 31, 2024 and 2023, respectively.
(2) Includes commercial construction loans of $18.9 million and $16.4 million as of December 31, 2024 and 2023, respectively.
(3) Includes overdraft protection of $39,000 and $35,000 as of December 31, 2024 and 2023, respectively.

Residential real estate loans serviced for others by the Company totaled $35.8 million and $39.0 million at December 31, 2024 and 2023, respectively.

At December 31, 2024, and 2023, $39.4 million and $55.8 million, respectively, of one- to four-family residential real estate loans were pledged as collateral for advances from the FHLB.

At December 31, 2024 and 2023, loans to related parties including officers and directors and their affiliates 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 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 model calculation, the loan portfolio is segmented into the following loan types:

Real Estate Loans:

- <u>Residential, One- to Four-Family</u> – 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.
- <u>Home Equity</u> - 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.
- <u>Commercial Real Estate</u> – 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:

- <u>Commercial</u> – includes business installment loans, lines of credit, and other commercial loans. Most of our commercial loans are for terms generally not in excess of five 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 residential, 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 tables detail the changes in the allowance for credit losses by loan segment for the years ended December 31, 2024 and 2023 as well as the related loan balances by individually evaluated and collectively evaluated as of December 31, 2024 and 2023.

| | Real Estate Loans | | | Other Loans | | |
|---|---|---|---|---|---|---|
| | One- to Four-Family[1] | Home Equity | Commercial Real Estate [2] | Commercial | Consumer | Total |
| | (Dollars in thousands) | | | | | |
| **December 31, 2024** | | | | | | |
| **Allowance for Credit Loss on Loans** | | | | | | |
| Balance - January 1, 2024 | $ 532 | $ 213 | $ 5,231 | $ 471 | $ 16 | $ 6,463 |
| Charge-offs | — | — | — | — | (41) | (41) |
| Recoveries | 10 | — | — | — | 9 | 19 |
| (Credit) provision | (152) | (76) | (1,060) | (50) | 30 | (1,308) |
| Balance – December 31, 2024 | $ 390 | $ 137 | $ 4,171 | $ 421 | $ 14 | $ 5,133 |
| Ending balance: individually evaluated | $ — | $ — | $ — | $ — | $ — | $ — |
| Ending balance: collectively evaluated | $ 390 | $ 137 | $ 4,171 | $ 421 | $ 14 | $ 5,133 |
| **Gross Loans Receivable[3]:** | | | | | | |
| Ending balance | $ 161,331 | $ 47,456 | $ 320,984 | $ 15,728 | $ 991 | $ 546,490 |
| Ending balance: individually evaluated | $ 131 | $ — | $ 1,242 | $ — | $ — | $ 1,373 |
| Ending balance: collectively evaluated | $ 161,200 | $ 47,456 | $ 319,742 | $ 15,728 | $ 991 | $ 545,117 |

(1) There were no one- to four-family construction loans at December 31, 2024.
(2) Includes commercial construction loans.
(3) Gross Loans Receivable does not include allowance for credit losses of $(5,133) or net deferred loan costs of $3,263.

| | 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 | $ 532 | $ 213 | $ 5,231 | $ 471 | $ 16 | $ — | $ 6,463 |
| Ending balance: individually evaluated | $ — | $ — | $ — | $ — | $ — | $ — | $ — |
| Ending balance: collectively evaluated | $ 532 | $ 213 | $ 5,231 | $ 471 | $ 16 | $ — | $ 6,463 |
| **Gross Loans Receivable[(3)]:** | | | | | | | |
| Ending balance | $ 172,005 | $ 51,869 | $ 316,986 | $ 16,546 | $ 1,130 | $ — | $ 558,536 |
| Ending balance: individually evaluated | $ 140 | $ — | $ 1,242 | $ — | $ — | $ — | $ 1,382 |
| Ending balance: collectively evaluated | $ 171,865 | $ 51,869 | $ 315,744 | $ 16,546 | $ 1,130 | $ — | $ 557,154 |

(1) Includes one- to four-family construction loans.
(2) Includes commercial construction loans.
(3) Gross Loans Receivable does not include allowance for credit losses of $(6,463) or net deferred loan costs of $3,755.

*Allowance for Credit Losses on 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 the (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 years ended December 31, 2024 and 2023 were as follows:

| | For the years ended December 31, 2023 and 2024 |
|---|---|
| | (Dollars in thousands) |
| Balance at December 31, 2022 | $ — |
| Impact of CECL Adoption | 633 |
| (Credit) Provision for Credit Losses | (146) |
| Balance at December 31, 2023 | 487 |
| (Credit) Provision for Credit Losses | (171) |
| Balance at December 31, 2024 | $ 316 |

*Non-accrual Loans and Delinquency Status*

The following table presents the amortized cost basis of loans on non-accrual status and loans on non-accrual status with no allowance for credit losses recorded. The Company did not have any loans past due 90 days or more and still accruing at December 31, 2024 and 2023.

| | Total Non-accrual | | Non-accrual with no Allowance for Credit Losses | |
|---|---|---|---|---|
| | December 31, 2024 | December 31, 2023 | December 31, 2024 | December 31, 2023 |
| | (Dollars in thousands) | | | |
| Real Estate Loans: | | | | |
| Residential, one- to four-family [1] | $ 1,891 | $ 1,904 | $ 1,891 | $ 1,904 |
| Home Equity | 683 | 196 | 683 | 196 |
| Commercial Real Estate [2] | 1,226 | 1,242 | 1,226 | 1,242 |
| Other Loans: | | | | |
| Commercial | — | — | — | — |
| Consumer | 4 | 5 | 4 | 5 |
| Total loans | $ 3,804 | $ 3,347 | $ 3,804 | $ 3,347 |

(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, 2024 and 2023. 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:

| | 30-59 Days Past Due | 60-89 Days Past Due | 90 Days or More Past Due | Total Past Due | Current Due | Total Gross Loans Receivable |
|---|---|---|---|---|---|---|
| | | | (Dollars in thousands) | | | |
| **December 31, 2024:** | | | | | | |
| Real Estate Loans: | | | | | | |
| Residential, one- to four-family[1] | $ 1,035 | $ 454 | $ 662 | $ 2,151 | $ 159,180 | $ 161,331 |
| Home equity | 318 | 26 | 596 | 940 | 46,516 | 47,456 |
| Commercial[2] | — | — | 1,242 | 1,242 | 319,742 | 320,984 |
| Other Loans: | | | | | | |
| Commercial | — | — | — | — | 15,728 | 15,728 |
| Consumer | 3 | 2 | — | 5 | 986 | 991 |
| Total | $ 1,356 | $ 482 | $ 2,500 | $ 4,338 | $ 542,152 | $ 546,490 |

| | 30-59 Days Past Due | 60-89 Days Past Due | 90 Days or More Past Due | Total Past Due | Current Due | Total Gross Loans Receivable |
|---|---|---|---|---|---|---|
| | | | (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] | — | — | 1,242 | 1,242 | 315,744 | 316,986 |
| Other Loans: | | | | | | |
| Commercial | — | — | — | — | 16,546 | 16,546 |
| Consumer | 6 | — | 1 | 7 | 1,123 | 1,130 |
| Total | $ 1,809 | $ 586 | $ 1,575 | $ 3,970 | $ 554,566 | $ 558,536 |

(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. 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, 2024 and 2023 by collateral type and loan segment:

| | Residential Properties | Business Assets | Land | Commercial Property | Other | Total Loans |
|---|---|---|---|---|---|---|
| **December 31, 2024:** | | | (Dollars in thousands) | | | |
| Real Estate Loans: | | | | | | |
| Residential, one- to four-family | $ 134 | $ — | $ — | $ — | $ — | $ 134 |
| Commercial | 200 | — | 1,026 | — | — | 1,226 |
| Total | $ 334 | $ — | $ 1,026 | $ — | $ — | $ 1,360 |
| **December 31, 2023:** | | | | | | |
| Real Estate Loans: | | | | | | |
| Residential, one- to four-family | $ 143 | $ — | $ — | $ — | $ — | $ 143 |
| 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, 2024 and 2023.

*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 tables present gross loans by credit quality indicator by origination year at December 31, 2024 and 2023:

| December 31, 2024: | 2024 | 2023 | 2022 | 2021 | 2020 | Prior | Revolving Loans | Total |
|---|---|---|---|---|---|---|---|---|
| | (Dollars in thousands) | | | | | | | |
| **Residential, one-to four-family[1]:** | | | | | | | | |
| Pass | 5,554 | 11,684 | 33,058 | 26,594 | 16,272 | 66,081 | — | 159,243 |
| Substandard | — | — | 447 | 265 | — | 1,377 | — | 2,088 |
| Doubtful | — | — | — | — | — | — | — | — |
| Total | 5,554 | 11,684 | 33,504 | 26,859 | 16,272 | 67,458 | — | 161,331 |
| Current period gross charge-offs | — | — | — | — | — | — | — | — |
| **Home Equity[2]:** | | | | | | | | |
| Pass | 102 | 2,712 | 2,297 | 76 | 34 | 574 | 40,899 | 46,694 |
| Substandard | — | — | — | — | — | — | 762 | 762 |
| Doubtful | — | — | — | — | — | — | — | — |
| Total | 102 | 2,712 | 2,297 | 76 | 34 | 574 | 41,661 | 47,456 |
| Current period gross charge-offs | — | — | — | — | — | — | — | — |
| **Commercial Real Estate[3]:** | | | | | | | | |
| Pass | 33,959 | 17,498 | 84,218 | 41,871 | 33,021 | 97,472 | 644 | 308,683 |
| Special mention | — | — | — | — | 895 | 1,646 | — | 2,541 |
| Substandard | — | — | — | — | 1,242 | 8,517 | — | 9,759 |
| Doubtful | — | — | — | — | — | — | — | — |
| Total | 33,959 | 17,498 | 84,218 | 41,871 | 35,158 | 107,636 | 644 | 320,984 |
| Current period gross charge-offs | — | — | — | — | — | — | — | — |
| **Commercial Loans:** | | | | | | | | |
| Pass | 3,232 | 981 | 1,980 | 483 | 349 | 1,745 | 2,725 | 11,496 |
| Special mention | — | — | — | 165 | — | 146 | 782 | 1,093 |
| Substandard | — | — | — | — | — | 2,183 | 956 | 3,139 |
| Doubtful | — | — | — | — | — | — | — | — |
| Total | 3,232 | 981 | 1,980 | 648 | 349 | 4,074 | 4,463 | 15,728 |
| Current period gross charge-offs | — | — | — | — | — | — | — | — |
| **Consumer Loans:** | | | | | | | | |
| Pass | 258 | 118 | 138 | 35 | 98 | 115 | 223 | 986 |
| Substandard | — | — | — | — | — | — | 4 | 4 |
| Doubtful | — | — | — | — | — | — | — | — |
| Total | 258 | 118 | 138 | 35 | 98 | 115 | 228 | 991 |
| Current period gross charge-offs | 5 | — | 2 | — | — | — | 34 | 41 |

(1) There were no one- to four-family construction loans at December 31, 2024.
(2) Home equity loans presented with an origination year represent home equity lines-of-credit which have been converted to term loans.
(3) Includes commercial construction loans.

| 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 charge-offs | $ — | $ — | $ 3 | $ — | $ — | $ — | $ — | $ 3 |
| **Home Equity[2]:** | | | | | | | | |
| 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 charge-offs | $ — | $ — | $ — | $ — | $ — | $ — | $ — | $ — |
| **Commercial Real Estate[3]:** | | | | | | | | |
| 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 charge-offs | $ — | $ — | $ — | $ — | $ — | $ — | $ — | $ — |
| **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 charge-offs | $ — | $ — | $ — | $ — | $ — | $ — | $ — | $ — |
| **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 charge-offs | $ — | $ 8 | $ 3 | $ 3 | $ 4 | $ — | $ 40 | $ 58 |

(1) Includes one- to four-family construction loans.
(2) Home equity loans presented with an origination year represent home equity lines-of-credit which have been converted to term loans.
(3) 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. 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 circumstances. These concessions may include, but are not limited to, principal forgiveness, an interest rate reduction, an other-than-insignificant payment delay, or a term extension. 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.

There were no loans modified to borrowers experiencing financial difficulty during the year ended December 31, 2024.

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 | $ | $ — | $ — | $ — | $ 4,859 | $ 1,046 | |

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

| Loan Type | Term Extension and Added Co-Borrower<br>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. |

None of the loans that were modified during the year ended December 31, 2023 subsequently defaulted and no modified loans were past due or on non-accrual as of December 31, 2024.

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. There was no foreclosed real estate at December 31, 2024, and $34,000 at December 31, 2023, which 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 $927,000 at December 31, 2024 and $158,000 at December 31, 2023.

## Note 6- Premises and Equipment

Premises and equipment consist of the following:

| | December 31, 2024 | December 31, 2023 |
|---|---|---|
| | (Dollars in thousands) | |
| Land | $ 1,210 | $ 1,210 |
| Buildings and improvements | 13,247 | 13,186 |
| Furniture and equipment | 7,600 | 7,596 |
| Premises and equipment, gross | 22,057 | 21,992 |
| Accumulated depreciation | (14,839) | (14,122) |
| Premises and equipment, net | $ 7,218 | $ 7,870 |

Depreciation of premises and equipment amounted to $739,000 and $807,000 for the years ended December 31, 2024 and 2023, 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, | | | |
|---|---|---|---|---|
| | 2024 | | 2023 | |
| | Amount | Weighted Average Rate | Amount | Weighted Average Rate |
| | (Dollars in thousands) | | | |
| Demand deposits: | | | | |
| Non-interest bearing | $ 96,412 | — % | $ 95,186 | — % |
| Interest bearing | 65,020 | 0.09 | 72,966 | 0.10 |
| Money market accounts | 149,550 | 2.26 | 137,374 | 2.75 |
| Savings accounts | 54,322 | 0.06 | 64,584 | 0.07 |
| Time deposits | 207,674 | 3.96 | 220,814 | 3.93 |
| | $ 572,978 | 2.04 % | $ 590,924 | 2.13 % |

Scheduled maturities of time deposits at December 31, 2024 were as follows (dollars in thousands):

| | |
|---|---|
| 2025 | $ 181,954 |
| 2026 | 16,525 |
| 2027 | 5,415 |
| 2028 | 3,056 |
| 2029 | 724 |
| Thereafter | — |
| | $ 207,674 |

Time deposit accounts with balances of $250,000 or more amounted to $33.9 million and $38.4 million at December 31, 2024 and 2023, respectively.

Interest expense on deposits was as follows:

| | Years Ended December 31, | |
|---|---|---|
| | 2024 | 2023 |
| | (Dollars in thousands) | |
| Interest bearing demand deposits | $ 64 | $ 75 |
| Money market accounts | 3,811 | 1,914 |
| Savings accounts | 40 | 47 |
| Time deposits | 9,162 | 6,033 |
| | $ 13,077 | $ 8,069 |

At December 31, 2024 and 2023, deposits of directors, executive officers and their affiliates totaled $1.6 million and $2.0 million, respectively.

At December 31, 2024 and 2023, there existed no deposit relationships greater than 5% of the Company's total deposits.

## Note 8 - Borrowings

At December 31, 2024 and 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, 2024 and 2023, our maximum lending value was $26.7 million and $36.8 million, respectively, and was collateralized by a pledge of certain fixed-rate residential, one- to four-family loans.

At December 31, 2024 and December 31, 2023, the Company had no short-term borrowings from the FHLBNY.

At December 31, 2024 and 2023, the Company had long-term debt outstanding under the written agreement with the FHLBNY of $10.3 million and $35.3 million, respectively. All of the advances outstanding at December 31, 2024 and 2023 were term borrowings with initial terms of one to six years at fixed rates of interest ranging from 1.70% to 5.20%. As of December 31, 2024 and 2023, the weighted average interest rate was 3.73% and 3.41%, respectively.

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

| | At December 31, 2024 | | At December 31, 2023 | |
|---|---|---|---|---|
| Maturity | Amount | Weighted Average Interest Rate | Amount | Weighted Average Interest Rate |
| | (Dollars in thousands) | | | |
| In one year | $ 8,250 | 3.79 % | $ 25,000 | 3.28 % |
| In two years | 1,000 | 3.49 % | 8,250 | 3.79 % |
| In three years | 1,000 | 3.49 % | 1,000 | 3.49 % |
| In four years | — | — % | 1,000 | 3.49 % |
| In five years | — | — % | — | — % |
| | $ 10,250 | 3.73 % | $ 35,250 | 3.41 % |

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, 2024 and December 31, 2023 there were no securities pledged to the FRB.

The Company has also established an unsecured line of credit with a correspondent bank for $20.0 million at December 31, 2024. At December 31, 2023, the Company had $27.0 million of credit lines established with correspondent banks, of which $25.0 million was unsecured and the remaining $2.0 million was secured by a pledge of the Company's securities when draws were made. At December 31, 2024 and 2023, there were no borrowings on these lines.

## 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, 2024 and 2023, two of the Company's branch offices were under an operating lease with associated ROU assets of $938,000 and $231,000, respectively, and lease liabilities of $944,000 and $242,000, respectively. The ROU assets are recorded under other assets and the lease liabilities are recorded under other liabilities and accrued interest payable 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, 2024 and 2023 were $152,000 and $150,000, respectively.

The table below summarizes information related to our lease liabilities at or for the years ended December 31, 2024 and 2023:

| (dollars in thousands) | For the Years Ended December 31, 2024 | 2023 |
|---|---|---|
| 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 | 44 | 51 |
| Financing cash flows from finance leases | 93 | 81 |
| Weighted-average remaining lease term in years – operating leases | 5.9 | 1.6 |
| Weighted-average discount rate – operating leases | 4.35 % | 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 and accrued interest payable on the consolidated statements of financial condition) at December 31, 2024 and 2023 was $378,000 and $475,000, respectively, with a discount rate of 9.22%. The remaining term of this lease is 3.5 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 $797,000 and $756,000 at December 31, 2024 and 2023, respectively.

The table below summarizes the maturity of remaining lease liabilities as of December 31, 2024:

| | Operating Leases | Finance Lease |
|---|---|---|
| | (Dollars in thousands) | |
| 2025 | $ 167 | $ 136 |
| 2026 | 184 | 136 |
| 2027 | 184 | 136 |
| 2028 | 184 | 56 |
| 2029 | 184 | — |
| 2030 and thereafter | 172 | — |
| Total Lease Payments | $ 1,075 | $ 464 |
| Less: Amounts representing interest | (131) | (86) |
| Present value of lease liabilities | $ 944 | $ 378 |

## 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, 2024 | 2023 |
|---|---|---|
| | (Dollars in thousands) | |
| Current: | | |
| Federal | $ 802 | $ 1,377 |
| State | 5 | 5 |
| Total Current | 807 | 1,382 |
| Deferred: | | |
| Federal | 128 | 17 |
| State | — | — |
| Total Deferred | 128 | 17 |
| Total Income Tax Expense | $ 935 | $ 1,399 |

A reconciliation of the statutory federal income tax at a rate of 21% for the years ended December 31, 2024 and 2023 to the income tax expense included in the consolidated statements of income is as follows:

| | Years Ended December 31, 2024 | 2023 |
|---|---|---|
| Federal income tax at statutory rate | 21.0 % | 21.0 % |
| State benefit, net of federal expense | (1.9) | (1.3) |
| Tax-exempt interest income | (2.8) | (3.3) |
| Deferred tax valuation allowance | 1.9 | 1.3 |
| Life insurance income | (3.8) | 3.5 |
| Other | 1.5 | 1.3 |
| Total Income Tax Expense | 15.9 % | 22.5 % |

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

| | December 31, 2024 | December 31, 2023 |
|---|---|---|
| | (Dollars in thousands) | |
| Deferred tax assets: | | |
| Unrealized losses on securities available for sale | $ 3,271 | $ 3,075 |
| Allowance for credit loss | 1,413 | 1,798 |
| Deferred compensation | 1,554 | 1,460 |
| Net operating losses ("NOL") | 290 | 153 |
| Impairment of equity investments | 130 | 129 |
| Accrued expenses | 98 | 84 |
| Right of use liabilities | 196 | 48 |
| Stock options granted | 11 | 16 |
| Other | — | 13 |
| **Total Deferred Tax Assets** | 6,963 | 6,776 |
| Deferred tax liabilities: | | |
| Deferred loan origination costs | (846) | (972) |
| Depreciation | (464) | (576) |
| Prepaid expenses | (123) | (36) |
| Right of use assets | (197) | (49) |
| Other | (62) | (49) |
| **Total Deferred Tax Liabilities** | (1,692) | (1,682) |
| Deferred tax valuation allowance | (1,354) | (1,203) |
| **Net Deferred Tax Asset** | $ 3,917 | $ 3,891 |

The net deferred tax asset was recorded in other assets on the consolidated statements of financial condition at December 31, 2024 and 2023. 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, 2024, except for the following:

- Valuation allowance of $130,000 on the deferred tax asset for the 2011 other than temporary impairment charge; and
- Valuation allowance of $1,224,000 on state deferred tax assets with anticipated net operating loss expiration dates of 2035 through 2044, 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 $151,000 increase in the deferred tax valuation recorded during 2024 and a $77,000 increase in the deferred tax valuation recorded during 2023.

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, 2024 and 2023, 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, 2024 and 2023. As of December 31, 2024, 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, 2021, 2022, 2023, and 2024 remain subject to examination by the IRS. The state tax returns for the years ended December 31, 2021, 2022, 2023, and 2024 for New York State remain subject to examination.

## Note 11 - Employee and Director Benefit Plans

### 401K Plan

The Company maintains a 401(k) savings plan covering employees who are employed on the first month following their initial date of employment 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 eligible employee's salary deferral, up to 6% of such employee's compensation, once an employee is eligible to participate in the 401(k) plan. 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, 2024 and 2023 was $554,000 and $452,000, 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 $278,000 and $324,000 at December 31, 2024 and 2023, respectively. This liability was included in other liabilities and accrued interest payable on the consolidated statements of financial condition and was calculated using an assumed discount rate of 6.17% in 2024 and 2023.

The Company's expense for the 1999 Plans was $18,000 and $23,000 for the years ended December 31, 2024 and 2023, 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 $2.9 million and $2.8 million at December 31, 2024 and 2023, 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 2024 and 2023.

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 $1.5 million and $1.6 million as of December 31, 2024 and 2023, respectively. This liability was included in other liabilities and accrued interest payable on the consolidated statements of financial condition and was calculated using an assumed discount rate of 5.12% in 2024 and 2023.

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 $370,000 and $819,000 for the years ended December 31, 2024 and 2023, 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 $775,000 and $627,000 as of December 31, 2024 and 2023, respectively. This liability was included in other liabilities and accrued interest payable on the consolidated statements of financial condition and was calculated using an assumed discount rate of 5.12% in 2024 and 2023.

The Company’s expense for the 2018 Plan was $147,000 and $135,000 for the years ended December 31, 2024 and 2023, 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 $29.3 million at December 31, 2024 and $29.4 million at December 31, 2023.

**2024 Supplemental Executive Retirement Plan Agreement**

Effective December 16, 2024, the Company entered into a supplemental executive retirement plan with one executive which replaces the prior supplemental executive retirement plan that the Company entered into with the executive on July 16, 2024. Under the plan, if the executive terminates employment on or after age 67, the Bank will pay the annual amount that is paid from the annuity contracts as defined in the plan, with such annual amount payable in twelve equal monthly installments for 15 years, and if the executive is living at the end of the 15 year payment period, such payments will continue for the remainder of the executive’s life. If the executive terminates employment before age 67, the Bank will pay the executive an amount equal to the amount that is paid from the annuity contracts, with such annual amount payable in twelve equal monthly installments for 15 years, and if the executive is living at the end of the 15 year payment period, such payments will continue for the remainder of the executive’s life. The plan also provides a benefit in the event of the executives disability, death, or upon the occurrence of a change in control followed by a qualifying termination of employment. The Company has a liability under this plan of $175,000 as of December 31, 2024, which was included in other liabilities and accrued interest payable on the consolidated statements of financial condition and was calculated using an assumed discount rate of 5.00% in 2024. The annuity contracts amounted to $3.2 million as of December 31, 2024 and were included within other assets on the consolidated statements of financial condition.

The Company's expense for the 2024 plan was $175,000 for the year ended December 31, 2024.

**Note 12 – Stock-based Compensation**

As of December 31, 2024, the Company had three active stock-based compensation plans, which are described below. The compensation cost related to these plans was $345,000 and $103,000 for the years ended December 31, 2024 and 2023, respectively, and is included within salary and benefits expense in the non-interest expense section of the consolidated statements of income.

**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, 2024 and 2023 is presented below:

| | 2024 | | | 2023 | | |
|---|---|---|---|---|---|---|
| | 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 | | 58,857 | $ 14.38 | |
| Granted | — | — | | — | — | |
| Exercised | — | — | | — | — | |
| Forfeited | (31,035) | $ 14.38 | | — | $ — | |
| Outstanding at end of period | 27,822 | $ 14.38 | 1.8 years | 58,857 | $ 14.38 | 2.8 years |
| Options exercisable at end of period | 27,822 | $ 14.38 | 1.8 years | 58,857 | $ 14.38 | 2.8 years |

At December 31, 2024, stock options granted under this plan had no intrinsic value and there were no remaining options available for grant under the Stock Option Plan. At December 31, 2024 all compensation cost and expense related to the Stock Option Plan had 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 EIP expired on April 24, 2024 and grants of awards can no longer be made.

The Board of Directors granted restricted stock awards under the EIP during 2024 as follows:

| Grant Date | Number of Restricted Stock Awards | Vesting | Fair Value per Share of Award on Grant Date | Awardees |
|---|---|---|---|---|
| April 23, 2024 | 19,730 | 100% on April 23, 2025 | $ 10.69 | Non-employee directors |
| April 23, 2024 | 32,522 | 25% per year for four years with first vesting on April 23, 2025 | $ 10.69 | Employees |

The Board of Directors granted stock options under the EIP during the year ended December 31, 2024 as follows:

| Grant Date | Number of Stock Option Awards | Vesting | Exercise Price | Awardees |
|---|---|---|---|---|
| April 23, 2024 | 9,306 | 20% per year for five years with first vesting on April 23, 2025 | $ 10.69 | Non-employee directors |

A summary of the status of unvested restricted stock awards under the EIP for the years ended December 31, 2024 and 2023 is as follows:

| | At December 31, 2024 | Weighted Average Grant Price (per Share) | At December 31, 2023 | Weighted Average Grant Price (per Share) |
|---|---|---|---|---|
| Unvested shares outstanding at beginning of year | 18,118 | $ 13.91 | 43,866 | $ 15.02 |
| Granted | 52,252 | 10.69 | 8,282 | 12.91 |
| Vested | (11,725) | 13.58 | (11,734) | 15.39 |
| Forfeited | (1,644) | 11.50 | (22,296) | 14.93 |
| Unvested shares outstanding at end of period | 57,001 | $ 11.10 | 18,118 | $ 13.91 |

As of December 31, 2024, there were 121,346 shares of restricted stock vested or distributed to eligible participants under the EIP and the plan expired on April 24, 2024. Accordingly, there were no remaining shares available for grant. Compensation expense related to restricted stock awards under the EIP amounted to $242,000 and $17,000 for the years ended December 31, 2024 and 2023, respectively. At December 31, 2024, $358,000 of unrecognized compensation cost related to unvested restricted stock awards is expected to be recognized over a period of 24.2 months.

A summary of the status of stock options under the EIP for the years ended December 31, 2024 and 2023 is as follows:

| | 2024 | | | | 2023 | | |
|---|---|---|---|---|---|---|---|
| | Options | Exercise Price | Intrinsic Value | Remaining Contractual Life | Options | Exercise Price | Remaining Contractual Life |
| Outstanding at beginning of year | 13,101 | $ 14.38 | | | 20,000 | $ 14.38 | |
| Granted | 9,306 | 10.69 | | | — | — | |
| Exercised | — | — | | | — | — | |
| Forfeited | (9,307) | 14.38 | | | — | — | |
| Expired | — | — | | | (6,899) | $ 14.38 | |
| Outstanding at end of period | 13,100 | $ 11.76 | $ 28,000 | 7.1 years | 13,101 | $ 14.38 | 2.8 years |
| Options exercisable at end of period | 3,794 | $ 14.38 | $ — | 1.8 years | 13,101 | $ 14.38 | 2.8 years |

| | Options | Exercise Price | Fair Value | Remaining Contractual Life |
|---|---|---|---|---|
| Fair value of options granted | 9,306 | $ 10.69 | $ 28,000 | 9.3 years |

Compensation expense related to unvested stock options under the EIP amounted to $4,000 for the year ended December 31, 2024. There was no compensation expense related to stock option under the EIP for the year ended December 31, 2023. At December 31, 2024, $24,000 of unrecognized compensation cost related to unvested stock options is expected to be recognized over a period of 4.3 years. During April 2024, the Company granted all remaining options available under the EIP. The EIP expired on April 24, 2024 and no additional options were available for grant nor issued after this date.

**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, 2024, the balance of the loan to the ESOP was $1.2 million and the fair value of unallocated shares was $1.3 million. As of December 31, 2024, there were 66,117 allocated shares and 95,219 unallocated shares compared to 74,895 allocated shares and 103,153 unallocated shares at December 31, 2023. The ESOP compensation expense was $99,000 for the year ended December 31, 2024 and $86,000 for the year ended December 31, 2023 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, 2024 and 2023 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.

Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date.

GAAP 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.

*Asset and Liabilities Measured at Fair Value on a Recurring Basis*

The Company's consolidated statements of financial condition contain investment securities 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, 2024 and 2023 were as follows:

| | Fair Value Measurements at December 31, 2024 | | | |
|---|---|---|---|---|
| | 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 | $ 1,851 | $ — | $ 1,851 | $ — |
| Municipal bonds | 32,288 | — | 32,288 | — |
| Mortgage-backed securities: | | | | |
| Collateralized mortgage obligations-private label | 9 | — | 9 | — |
| Collateralized mortgage obligations-government sponsored entities | 8,942 | — | 8,942 | — |
| Government National Mortgage Association | 50 | — | 50 | — |
| Federal National Mortgage Association | 9,013 | — | 9,013 | — |
| Federal Home Loan Mortgage Corporation | 4,240 | — | 4,240 | — |
| Asset-backed securities: | | | | |
| Private label | 28 | — | 28 | — |
| Government sponsored entities | 1 | — | 1 | — |
| Total Debt Securities | 56,422 | — | 56,422 | — |
| Equity securities | 73 | 73 | — | — |
| Total Securities | $ 56,495 | $ 73 | $ 56,422 | $ — |

| | 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 | $ — |

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.

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 measurement 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. The Company had no collateral-dependent loans with a recorded allowance for credit losses as of December 31, 2024 and December 31, 2023.

*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. There was no foreclosed real estate at December 31, 2024 and $34,000 at December 31, 2023, which was included as a component of other assets on the consolidated statements of financial condition. The Company did not have repossessed assets at December 31, 2024 and December 31, 2023.

*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. Mortgage servicing rights amounted to $177,000 and $191,000 at December 31, 2024 and December 31, 2023, respectively, and were included as a component of other assets on the consolidated balance sheets.

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, 2024 and 2023 were as follows:

| | Fair Value | Fair Value Measurements<br>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 non-recurring basis:** | | | | |
| **At December 31, 2024** | | | | |
| Mortgage servicing rights | $ 177 | $ — | $ — | $ 177 |
| **At December 31, 2023** | | | | |
| Collateral-dependent loans | $ 1,369 | $ — | $ — | $ 1,369 |
| Foreclosed real estate | 34 | — | — | 34 |
| Mortgage servicing rights | 191 | — | — | 191 |

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:

| | Quantitative Information about Level 3 Fair Value Measurements | | | | |
|---|---|---|---|---|---|
| *(Dollars in thousands)* | Fair Value Estimate | Valuation Technique | Unobservable Input | Range | Weighted Average |
| **At December 31, 2024** | | | | | |
| Mortgage servicing rights | $ 177 | Discounted Cash Flow Model (1) | Servicing Fees | 0.25% | 0.25% |
| | | | Servicing Costs | 0.10% | 0.10% |
| | | | Estimated Life of Loans | 5.17 - 6.17 years | 5.67 years |
| **At December 31, 2023** | | | | | |
| Collateral-dependent loans | $ 1,369 | Appraisal of collateral (2) | Direct Disposal Costs (3) | 8.00-10.00% | 9.75% |
| Foreclosed real estate | 34 | Appraisal of collateral (2) | Direct Disposal Costs (3) | 8.00% | 8.00% |
| Mortgage servicing rights | 191 | Discounted Cash Flow Model (1) | Servicing Fees | 0.25% | 0.25% |
| | | | Servicing Costs | 0.09% | 0.09% |
| | | | Estimated Life of Loans | 5.32 years | 5.32 years |

(1) 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.

(2) 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.

(3) The fair value basis of 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.

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

| | | | Fair Value Measurements at December 31, 2024 | | |
|---|---|---|---|---|---|
| | 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 | $ 33,131 | $ 33,131 | $ 33,131 | $ — | $ — |
| Securities | 56,495 | 56,495 | 73 | 56,422 | — |
| Federal Home Loan Bank stock | 1,157 | 1,157 | — | 1,157 | — |
| Loans receivable, net | 544,620 | 525,728 | — | — | 525,728 |
| Accrued interest receivable | 2,819 | 2,819 | — | 2,819 | — |
| Bank-owned life insurance | 29,340 | 29,340 | — | 29,340 | — |
| Mortgage servicing rights | 177 | 177 | — | — | 177 |
| Financial liabilities: | | | | | |
| Deposits | 572,978 | 572,082 | — | 572,082 | — |
| Long-term debt | 10,250 | 10,199 | — | 10,199 | — |
| Accrued interest payable | 99 | 99 | — | 99 | — |

| | | | 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 | — |

## 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" ("CBLR") 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 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, 2024 and 2023, the Bank was considered a “qualifying community bank” and its CBLR was 13.83% and 12.68%, respectively, therefore 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, 2024 and 2023:

| | December 31, | |
|---|---|---|
| | 2024 | 2023 |
| | (Dollars in thousands) | |
| **GAAP (Equity) Capital:** | $ 87,280 | $ 82,487 |
| Plus: | | |
| Unrealized losses on available-for-sale debt securities, net of tax | 9,964 | 9,385 |
| **Tier 1 Capital and CET 1 Capital** | $ 97,244 | $ 91,872 |

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, 2024, the Bank’s Tier 1 Leverage capital ratio was 13.83% and its Total Risk-Based capital ratio was 18.79% and accordingly the Bank was considered to be well-capitalized.

## Note 15 – Earnings per Share

Earnings per share was calculated for the years ended December 31, 2024 and 2023, respectively. Basic earnings per share is based upon the weighted average number of common shares outstanding, exclusive of unearned shares held by the Employee Stock Ownership Plan of Lake Shore Bancorp, Inc. (the "ESOP"). Unvested shares of restricted stock which have voting rights and are eligible to receive dividends are included in the calculation of the weighted average number of common shares outstanding. 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, | |
|---|---|---|
| | 2024 | 2023 |
| Numerator – net income | $ 4,931,000 | $ 4,820,000 |
| Denominator: | | |
| Basic weighted average shares outstanding | 5,621,824 | 5,855,505 |
| Increase in weighted average shares outstanding due to: | | |
| Stock options[(1)] | — | — |
| Diluted weighted average shares outstanding[(1)] | 5,621,824 | 5,855,505 |
| Earnings per share: | | |
| Basic | $ 0.88 | $ 0.82 |
| Diluted | $ 0.88 | $ 0.82 |

(1) Weighted average stock options to purchase 34,740 shares under the Company's 2006 Stock Option Plan and 17,562 shares under the EIP at $14.38 and $10.69, respectively, were outstanding during the year ended December 31, 2024. Weighted average 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 the year ended December 31, 2023. For both periods presented, these options 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 $316,000 and $487,000 allowance for credit losses associated with these commitments at December 31, 2024 and December 31, 2023, respectively.

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

| | Contract Amount | |
|---|---|---|
| | December 31, 2024 | December 31, 2023 |
| | (Dollars in thousands) | |
| Commitments to grant loans | $ 3,098 | $ 21,045 |
| Unfunded commitments to fund loans and lines of credit | 96,711 | 75,721 |
| Commercial and Standby letters of credit | 765 | 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, 2024 and 2023 and for the years ended December 31, 2024 and 2023.

### Statements of Financial Condition

| | December 31, | |
|---|---|---|
| | 2024 | 2023 |
| | (Dollars in thousands) | |
| **Assets** | | |
| Cash and due from banks | $ 906 | $ 2,272 |
| Investment in subsidiary | 87,281 | 82,487 |
| ESOP loan receivable | 1,224 | 1,294 |
| Other assets | 607 | 337 |
| **Total assets** | $ 90,018 | $ 86,390 |
| **Liabilities and Stockholders' Equity** | | |
| Other liabilities | 150 | 117 |
| Total stockholders' equity | 89,868 | 86,273 |
| **Total liabilities and stockholders' equity** | $ 90,018 | $ 86,390 |

## Statements of Income

| | For the Years Ended December 31, 2024 | For the Years Ended December 31, 2023 |
|---|---|---|
| | (Dollars in thousands) | |
| Interest Income | $ 98 | $ 183 |
| Other | 6 | 7 |
| **Total Income** | 104 | 190 |
| Non-interest Expenses | 489 | 577 |
| Loss before income taxes and equity in undistributed net income of subsidiary | (385) | (387) |
| Income tax benefit | (99) | (81) |
| Loss before undistributed net income of subsidiary | (286) | (306) |
| Equity in undistributed net income of subsidiary | 5,217 | 5,126 |
| **Net Income** | $ 4,931 | $ 4,820 |

## Statements of Cash Flows

| | For the Years Ended December 31, 2024 | For the Years Ended December 31, 2023 |
|---|---|---|
| | (Dollars in thousands) | |
| **Cash Flows from Operating Activities:** | | |
| Net income | $ 4,931 | $ 4,820 |
| Adjustments to reconcile net income to net cash (used in) provided by operating activities: | | |
| ESOP shares committed to be released | 99 | 86 |
| Stock based compensation expense | 246 | 17 |
| (Increase) decrease in other assets | (426) | 297 |
| Increase in other liabilities | 33 | 87 |
| Equity in undistributed earnings of subsidiary | (5,217) | (5,126) |
| **Net Cash (Used in) Provided by Operating Activities** | (334) | 181 |
| **Cash Flows from Investing Activities:** | | |
| Payments received on ESOP loan | 70 | 65 |
| **Net Cash Provided by Investing Activities** | 70 | 65 |
| **Cash Flows from Financing Activities:** | | |
| Purchase of treasury stock | (20) | (58) |
| Cash dividends paid | (1,082) | — |
| **Net Cash Used in Financing Activities** | (1,102) | (58) |
| Net (Decrease) Increase in Cash and Cash Equivalents | (1,366) | 188 |
| Cash and Cash Equivalents - Beginning | 2,272 | 2,084 |
| Cash and Cash Equivalents - Ending | $ 906 | $ 2,272 |

## Note 18 – Treasury Stock

During the year ended December 31, 2024, the Company did not repurchase any shares of common stock under the existing stock repurchase program. As of December 31, 2024, there were 30,626 shares remaining to be repurchased under the existing stock repurchase program. During the year ended December 31, 2024, the Company transferred 52,252 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, 2024, there were 1,644 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 1,670 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 $11.82 per share, during the year ended December 31, 2024.

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.

## Note 19 – Other Comprehensive (Loss) Income

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

| | For the Year Ended December 31, 2024 | | | For the Year Ended December 31, 2023 | | |
|---|---|---|---|---|---|---|
| | Pre-Tax Amount | Tax Benefit | Net of Tax Amount | Pre-Tax Amount | Tax (Expense) Benefit | Net of Tax Amount |
| | | | (Dollars in thousands) | | | |
| Net unrealized (losses) gains on securities available for sale: | | | | | | |
| Net unrealized (losses) gains arising during the period | $ (726) | $ 152 | $ (574) | $ 1,146 | $ (241) | $ 905 |
| 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 | (6) | 1 | (5) | (7) | 2 | (5) |
| **Total Other Comprehensive (Loss) Income** | $ (732) | $ 153 | $ (579) | $ 1,198 | $ (251) | $ 947 |

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, 2024 | 2023 | Affected Line Item on the Consolidated Statements of Income |
|---|---|---|---|
| | (Dollars in thousands) | | |
| Net unrealized (losses) gains 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 | (6) | (7) | Recovery on previously impaired investment securities |
| Provision for income tax expense (benefit) | 1 | (10) | Income tax expense |
| Total reclassification for the period | $ (5) | $ 42 | (Increase to) Reduction of 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 funds 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 obligations 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 out-of-network 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.

**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, 2024 and 2023, 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, 2024 and 2023:

| | For the years ended December 31, 2024 | 2023 |
|---|---|---|
| | (Dollars in thousands) | |
| **Non-Interest Income** | | |
| In-Scope of Topic 606: | | |
| Debit card fees | $ 816 | $ 846 |
| Service charges on deposit accounts | 722 | 709 |
| Fees and other service charges | 126 | 127 |
| Other | 31 | 34 |
| Non-interest Income (in-scope of Topic 606) | 1,695 | 1,716 |
| Non-interest Income (out of scope of Topic 606) | 1,609 | 919 |
| **Total Non-Interest Income** | $ 3,304 | $ 2,635 |

**Note 21 – Subsequent Events**

On January 27, 2025, the Board of Directors of Lake Shore Bancorp, Inc. declared a cash dividend of $0.18 per share on its outstanding common stock. The dividend was paid on February 14, 2025 to stockholders of record as of February 10, 2025. The Company received the written approval from the Federal Reserve Bank of Philadelphia on January 9, 2025 to pay the cash dividend of $0.18 per share to its stockholders. Lake Shore, MHC waived its right to the dividend.

On January 27, 2025, the Board of Directors of Lake Shore, MHC, the parent mutual holding company of Lake Shore Bancorp, Inc., adopted a Plan of Conversion and Reorganization ("the Plan") pursuant to which Lake Shore, MHC will undertake a "second-step" conversion and Lake Shore Savings Bank, the wholly-owned subsidiary of Lake Shore Bancorp, will reorganize from the two-tier mutual holding company structure to the fully-public stock holding company structure. Following the conversion and reorganization, Lake Shore, MHC will cease to exist and a newly-chartered stock holding company (the "New Bank Holding Company") will succeed to Lake Shore Bancorp as the stock holding company of Lake Shore Savings Bank. In connection with the second step conversion, Lake Shore Savings Bank is seeking regulatory approval to convert its charter to a New York-chartered commercial bank. Lake Shore, MHC currently owns approximately 63.4% of the outstanding shares of common stock of Lake Shore Bancorp. The proposed transaction is expected to be completed in the third quarter of 2025, subject to regulatory approval, approval by the members of Lake Shore, MHC (i.e., depositors of the Bank), and approval by the stockholders of the Company, including by a separate vote of approval by the Company's minority stockholders.

On February 4, 2025, the stockholders of Lake Shore Bancorp, Inc. approved the Company's 2025 Equity Incentive Plan which provides for the grant of stock-based awards to officers, employees, and directors of the Company and Lake Shore Savings Bank.

On March 11, 2025, the Company suspended the payment of dividends pending the completion of the second-step conversion.

Exhibit 10.14

# Lake Shore Savings Bank

## Annual Incentive Plan

## Annual Incentive Plan

The Annual Incentive Plan is designed to compensate plan participants for the attainment of specified bank, department or division, and individual goals. The objective is to align the interests of our executives with the interests of the Bank and our shareholders in obtaining superior financial results.

The Plan operates on a calendar year basis (January 1st to December 31st). This same calendar year is the performance-period for determining the amount of incentive awards to be paid following year end.

### PERFORMANCE CRITERIA

- **Bank Performance** - For all plan participants, a portion of the annual incentive will be based on overall bank performance. The Compensation Committee will work with Management to set appropriate bank-wide goals on an annual basis and these may change from year to year. In addition, the Compensation Committee will review the combination of goals, and this annual incentive program, to ensure it does not expose the organization to material risk or risky behavior.

- **Div/ Dept/Branch Performance** - For all plan participants, a portion of the annual incentive may be based on overall department, division or branch performance. Management will set appropriate goals for participants on an annual basis based on their position and function. We note that these may change from year to year based on each participant's role at the Bank and our strategic objectives.

- **Individual Performance** - At the beginning of each performance year, individual goals will be set for each participant. Each individual goal will be mutually exclusive; thus, one goal may be met and paid even though another goals is not achieved. However, individual performance goals must meet at least threshold performance levels before the bank-wide element will be paid out. For example, if the bank-wide goals are met, but the participant fails to meet threshold levels of his or her individual performance goals, no payout will be made for the bank-wide element to said participant.

### PERFORMANCE STANDARDS

For each performance factor (Overall Bank, Dept, Branch, and Individual), an appropriate standard of performance must be established with three essential performance points:

- **Threshold Performance:** That level of performance for each factor below which no award will be given. For net income goals, we set threshold goals at 90% of target (budget) goals for the performance year.

- **Target Performance:** The level of performance for each factor at budgeted goals. The budgeted, or expected, level of performance is based upon historical data and approved budgets for expected performance during the upcoming performance period. The Compensation Committee and Board will approve bank-wide goals on an annual basis.

- **Maximum:** This plan is designed to pay for maximum performance, which we have defined as exceeding targeted goals by a significant amount. For the Bank-wide net income goal, the targeted net income goal must be exceeded by 10% to pay out at maximum levels. For other goals, we generally set maximum performance at 10% above target goals where appropriate and the performance metric is a line item on our budget. Maximum levels for some performance ratios or growth goals (such as NPAs and deposit) were set by assessing the degree of stretch between target and max, and the incremental performance that the Committee believes should result in a maximum payout level.

- **Superior:** The plan will pay for superior performance defined by exceeding targeted goals by 20%.

## PLAN PAYOUTS

Participants must be in good standing with the Bank. If an employee is on probation or receives an unsatisfactory performance review, he or she may forfeit any award payouts that performance year.

After all performance results are available at year-end, the awards will be calculated for each Plan participant and approved by the Compensation Committee. The Compensation Committee may, at their discretion, allow participants to receive their award in cash, stock, or a combination.

The actual award payouts will be calculated using a ratable approach, where award payouts are calculated as a proportion of minimum, target, maximum and superior award opportunities. If actual performance falls between a performance level, the payout will also fall between the pre-defined performance level on a pro-rated basis. A Plan participant must be an employee at the time of the award payout in order to receive a payout. The result of the performance criteria is calculated as a percent of base salary for participants during the current Plan year. Plan payouts will be made no later than 75 days after the year end.

Lake Shore Savings Bank has the right to recover any incentive payments that were made based on material misstatements or inaccurate performance metrics.

## PLAN ADMINISTRATION

**Responsibilities of the Compensation Committee:** The Compensation Committee has the responsibility to approve, amend, or terminate the Plan as necessary. The actions of the Compensation Committee shall be final and binding on all parties. The Compensation Committee shall also review the operating rules of the Plan on an annual basis and revise these rules if necessary. The Compensation Committee also has the sole ability to decide if an extraordinary event totally outside of management’s influence, be it a windfall or a shortfall, has occurred during the current Plan year, and whether the figures should be adjusted to neutralize the effects of such events. After approval by the Compensation Committee, management shall, as soon as practical, inform each of the Plan participants under the Plan of their potential award under the operating rules adopted for the Plan year.

**Responsibilities of the CEO:** The CEO of the Company, at the direction of the Compensation Committee, administers the program and provides liaison to the Compensation Committee, including the following specific responsibilities: recommend the participants to be included in the Plan each year (this includes determining if additional employees should be added to the Plan and if any Plan participants should be removed from participating in the Plan); provide recommendations for the award opportunity amounts at threshold, target, maximum and superior for employees other than himself; review the objectives and evaluations, adjust guideline awards for performance and recommend final awards to the Compensation Committee; and, provide other appropriate recommendations that may become necessary during the life of the Plan. This could include such items as changes to Plan provisions.

**Amendments and Plan Termination:** The Company has developed the Plan on the basis of existing business, market and economic conditions, current services, and staff assignments. If substantial changes occur that affect these conditions, services, assignments, or forecasts, the Company may add to, amend, modify, or discontinue any of the terms or conditions of the Plan at any time with approval from the Compensation Committee. The Compensation Committee may, at its sole discretion, terminate, change, or amend any of the Plan as it deems appropriate.

## MISCELLANEOUS

**Reorganization:** If the Company shall merge into or consolidate with another company, reorganize, or sell substantially all of its assets to another company, firm, or person, such succeeding or continuing company, firm, or person shall succeed to, assume, and discharge the obligations of the Company under this Plan. Upon the occurrence of such event, the term “Company”, as used in this Plan, shall be deemed to refer to the successor or survivor company.

**Tax Withholding:** The Company shall withhold any taxes that are required to be withheld from the benefits provided under this Plan.

**Designated Fiduciary:** The Company shall be the named fiduciary and Plan Administrator under the Plan. The named fiduciary may delegate to others certain aspects of the management and operation responsibilities of the Plan, including the employment of advisors and the delegation of ministerial duties to qualified individuals.

**No Guarantee of Employment:** This Plan is not an employment policy or contract. It does not give the Plan participant the right to remain an employee of the Company, nor does it interfere with the Company's right to discharge the Plan participant.

# LAKE SHORE BANCORP, INC.
# LAKE SHORE SAVINGS BANK
# STATEMENT OF COMPANY POLICY
# REGARDING CONFIDENTIAL INFORMATION AND STOCK AND SECURITIES TRADING BY DIRECTORS, OFFICERS AND EMPLOYEES

*The Purpose of the Stock Trading and Insider Information Policy*

The Securities and Exchange Commission ("SEC"), the Financial Industry Regulatory Authority ("FINRA") and federal prosecutors vigorously pursue violations of the federal securities laws, including insider trading violations. An "insider trading" violation occurs when a person buys or sells the securities of a company while in possession of material information about the company that is not known to the public or when a person gives a "tip" about such material non-public information to someone else who then trades in that company's securities.

The penalties are not limited to those who actually engage in illegal trading. Under the various laws designed to prevent insider trading, substantial penalties may be imposed on companies and their controlling persons who fail to take appropriate steps to prevent illegal trading or "tipping" of inside information by company personnel. As a consequence, companies like Lake Shore Bancorp, Inc. (the "Company") and its subsidiary, Lake Shore Savings Bank, (the "Bank") find it necessary to adopt preventive policies and procedures covering securities trading by company personnel.

In addition to our concern over corporate liability under the federal securities laws, we are committed to avoiding even the appearance of improper or inappropriate conduct on the part of anyone employed by or associated with the Company or the Bank. We have all worked hard over the years to establish our reputation for integrity and ethical conduct. It is our most important asset, and we must all protect it.

*Statement of Policy*

The Company has adopted the following Statement of Policy:

**If a director, officer or any employee obtains or becomes aware of material nonpublic information relating to the Company or the Bank, it is the Company's policy that neither that person nor any member of that person's immediate family or any member of that person's household may buy, sell or gift securities of the Company or engage in any other action to take advantage of, or pass on to others, that information. This policy also applies to information relating to any other company, including depositors or borrowers, obtained in the course of employment.**

**Transactions that may be necessary or justifiable for independent reasons (such as the need to raise money for any emergency expenditure) are no exception. The Company's common stock should be viewed by all directors, officers and employees as a long-term investment and should not, either directly or indirectly, be used to "play the market" either through individual transactions or transactions under any employee benefit plan. Even the**

**appearance of an improper or inappropriate transaction should be avoided to preserve the Company's reputation for adhering to the highest standards of conduct.**

Remember, if your securities transactions become the subject of scrutiny, they will be viewed after-the-fact with the benefit of hindsight. As a result, before engaging in any transaction you should carefully consider how regulators, prosecutors, courts and others might view your transaction in hindsight. Be advised that there are some employees of the SEC and FINRA and private attorneys whose primary job is to investigate and prosecute violations of the insider trading laws, and they will not give you the "benefit of the doubt" when reviewing your securities transactions.

<u>Material Information</u>. Under relevant court decisions, information is material if there is a substantial likelihood that a reasonable investor would consider it important in a decision to buy, hold or sell securities. Thus, any information which could reasonably affect the price of securities is material, as well as any information important to a decision of how to vote in a proxy contest or how to respond to a tender offer. Common examples of information that will frequently be regarded as material are:

- earnings or losses;
- financial forecasts, especially projections of future earnings or losses;
- news of a pending or proposed merger, acquisition, or tender offer;
- news of a significant purchase or sale of assets;
- changes in dividend policy or the declaration of a stock split or the offering of additional securities;
- decisions to repurchase securities;
- changes in management;
- significant changes in operations;
- cybersecurity events or data breaches;
- increases or decreases in non-performing assets;
- significant increases or decreases in loan originations;
- information regarding the ability of a borrower to repay a significant loan;
- extraordinary borrowing or investment;
- major litigation; and
- financial liquidity.

Either positive or negative information may be material. When in doubt, assume that information about any of these items is material and has not been disclosed to the public.

<u>When Information Is Public</u>. It is also inadvisable for you to enter into a trade immediately after the Company has made a public announcement of material information, including earnings press releases. Because the Company's shareholders and the investing public should be afforded the time to receive the information and act upon it, as a general rule you should not engage in any transactions until the second business day after a public announcement of material information. Thus, if any announcement is made during or after trading hours on a Monday, Wednesday generally would be the first day on which you may trade. If an announcement is made prior to opening of trading on a Monday, Tuesday generally should be the first day on which you may

trade. If an announcement is made during or after trading hours on Friday, the following Wednesday generally would be the first day. For your reference, the Company's quarterly and annual earnings press releases usually are issued during the third, fourth, or fifth week following the conclusion of the period for which earnings are being reported.

Additional Guidance. The Company considers it improper and inappropriate for those employed by or associated with the Company to engage in short-term or speculative transactions in the Company's securities or in other transactions in the Company's securities that may lead to inadvertent violations of the insider trading laws. Accordingly, your trading in Company securities is subject to the following additional guidance.

Short Sales. You may not engage in short sales of the Company's securities (sales of securities that are not then owned), including a "sale against the box" (a sale with delayed delivery).

Publicly Traded Options. You may not engage in transactions in publicly traded options, such as puts, calls and other derivative securities, on an exchange or in any other organized market.

Standing Orders. Standing orders should be used only for a very brief period of time. A standing order placed with a broker to sell or purchase stock at a specified price leaves you with no control over the timing of the transaction. A standing order transaction executed by the broker when you are aware of material nonpublic information may result in unlawful insider trading.

Pledging Company Stock. Directors and executive officers are generally prohibited from pledging Company stock as collateral for any loan or holding Company stock in a margin account. The Board of Directors may approve an exception to this policy for a pledge of Company stock as collateral for a loan from a third party (not including margin debt) where the borrower clearly demonstrates the financial capacity to repay the loan without resort to the pledged securities.

Stock Options. The Company should not generally make option awards to Named Executive Officers (as defined in SEC Regulation S-K) in the four business days before the filing of a periodic report on Forms 10-Q and 10-K as applicable or the filing or furnishing of a Current Report on Form 8-K that discloses material nonpublic information (including earnings information but excluding a Form 8-K that discloses only the grant of a material new option award) and ending one business day after such triggering event. A director, officer or employee may exercise a stock option at any time, but any stock acquired upon such exercise may not be sold (whether by means of a cashless exercise or otherwise) if the employee has material nonpublic information regarding the Company. At any time, however, an employee may deliver Company stock already owned to pay the option exercise price and taxes.

Company Stock Repurchases. Directors and executive officers are discouraged from purchasing or selling Company shares within four business days before or after an announcement of a share repurchase plan, or an announcement of any increase in a share repurchase plan. The Company is prohibited from repurchasing its stock while in possession of material nonpublic information unless pursuant to a Rule 10b5-1 trading plan as set forth below.

Tipping Information to Others. Whether the information is proprietary information about the Company or information that could have an impact on the price of the Company's common stock, you must not pass the information on to others, including your family members. The above penalties apply whether or not you derive any benefit from another's actions.

Transactions by Family Members. The same restrictions regarding insider trading apply to members of your immediate family, and others living in your household as well as any other person or entity (i.e., corporations, partnerships, trusts, etc.) with whom you may be deemed to share beneficial ownership of the Company's common stock. Each employee is responsible for the compliance of such persons and entities.

Post-Termination Transactions. This policy continues to apply to your transactions in Company securities even after you have terminated employment or other services to the Company as follows: if you are aware of material nonpublic information when your employment or service relationship terminates, you may not trade in Company securities until that information has become public or is no longer material.

*Requirements Applicable to Directors, Officers and Employees.*

All directors, officers and employees of the Company shall comply with the following guidelines and procedures when engaging in transactions in the Company's common stock.

Period of Prohibited Transactions (Window Period). Because directors, officers and employees may be aware of material information prior to it being made public and to avoid any appearance of impropriety, it is Company policy that no director, officer or employee may engage in any transaction involving the Company's common stock commencing the 20th calendar day prior to the end of each fiscal quarter through and until the second business day after a public announcement of quarter end earnings. Furthermore, transactions should not be made if directors, officers or employees have knowledge of material information that has not yet been made public from the time knowledge is obtained until the second business day after a public announcement is made.

From time to time, Company management may conclude that directors, officers and employees should refrain from trading in the Company's securities during a certain specified time period, even though such period falls within a window period. These restricted trading periods will be imposed in response to existing or pending events or circumstances that management believes create an increased risk of insider trading. In such situations, the Company will advise the directors, officers and employees in writing that they may not engage in any trades until further notice. Affected persons will be notified in writing when the restricted trading period ends.

Pre-Clearance of all Trades. To continue to provide assistance in preventing inadvertent violations and avoiding even the appearance of an improper or inappropriate transaction (which could result, for example, where an officer engages in a trade while unaware of a pending major development), the policy of the Company is the following:

**Before any director, officer or employee buys or sells any Lake Shore Bancorp, Inc. common stock or enters into any other transaction with respect to Company securities, that person is required to notify the Company's Compliance Officer or Chief Financial Officer and Treasurer who will act as the compliance officers, describing the transaction. The notice should be given in writing whenever possible and should, in no event, be given via a voicemail message. Any proposed transaction may be referred to the Company's legal counsel, or other appropriate actions may be taken to determine whether there is material non-public information concerning the Company. The Company will try to respond — approve or not approve the transaction — on the same business day. If material non-public information exists, the Company may ask that person not to proceed with the proposed transaction. However, because new material information could develop at any time, an approved securities transaction should be completed promptly.**

<u>Notification of All Trades.</u> To keep an accurate record of transactions in the Company's common stock by individuals most likely to be in possession of material nonpublic information, the Company also implements the following procedure:

**Immediately, and in any event no later than 9 a.m. on the immediately following business day, after any director, officer or employee buys or sells any shares of the Company's common stock, that person is required to notify the Company's Compliance Officer or Chief Financial Officer and Treasurer, the compliance officers, or the Company's Controller (as back-up) or any such person or persons as they shall designate from time to time to act in their absence, describing the completed transaction. Whenever possible, this notice should be given in writing to the Company's Compliance Officer or Chief Financial Officer and Treasurer within 24 hours and include a copy of the trade confirmation.**

If you are a beneficiary of a trust managed by another without consultation or approval by you, compliance with the pre-clearance and notification procedure is not required for transactions by the trust. If, however, there is consultation or approval prior to a trade, this exception will not apply.

For the directors and the Executive Officers who are "Reporting Persons" of the Company for purposes of the federal securities laws, the Company's program for compliance with the reporting obligations of directors and executive officers and with the "short-swing" transactions restrictions of the federal securities laws will be provided separately.

Please remember that even if the Company advises you that there is no material nonpublic information about the Company, the Company is not responsible for your securities transactions. You are solely responsible for your investment decisions and for any misuse of non-public information. You alone will suffer the consequences if you engage in securities transactions on the basis of non-public information or if you disclose the information. Please be careful not to do so.

<u>Unauthorized Disclosure.</u> Maintaining the confidentiality of Company information is essential for competitive, security and other business reasons, as well as to comply with securities laws.
You should treat all information you learn about the Company or the Bank or its business plans in connection with your employment as confidential and proprietary. Inadvertent disclosure of

confidential or inside information may expose the Company and you to significant risk of investigation and litigation.

The timing and nature of the Company's disclosure of material information to outsiders is subject to legal rules, the breach of which could result in substantial liability to you, the Company and its management. Accordingly, it is important that responses to inquiries about the Company by the press, investment analysts or others in the financial community be made on the Company's behalf only through authorized individuals, namely the Chairman of the Board and/or the President/CEO.

*Purchases by Directors, Officers or Employees Pursuant to a Contract, Instruction or Plan.*

Directors, officers and employees will be authorized to engage in transactions in Company securities without following the procedures in the section titled "Requirements Applicable to Directors, Officers and Employees" only under the following conditions:

1. The transaction occurs pursuant to a contract, instruction or plan meeting the requirements of 17 CFR 240.10b5-1, a summary of which is included below;

2. The contract, instruction or plan must be in writing and executed by the director, officer or employee;

3. The contract, instruction or plan must be submitted in advance to the Company and approved by the Board of Directors;

4. The contract, instruction or plan must provide for a same-day reporting mechanism by the person authorized to engage in the transaction on behalf of the director, officer or employee and all transactions by directors, officers or employees under the contract, instruction or plan must be reported to the Company on the day they occur;

5. A director, officer or employee who conducts transactions under a contract, instruction or plan approved in advance by the Company will be responsible for and will be required to acknowledge in writing their responsibility for preparing and filing all Forms 144 for sale transactions;

6. The party authorized under the contract, instruction or plan to engage in transactions must be an institutional broker/dealer or registered investment advisor acceptable to the Company and in which the director, officer or employee has no relationship other than as a customer;

7. Contracts, instructions or plans may not provide for both purchases and sales and any such contract, instruction or plan will not be approved;

8. If a director or officer has engaged in a sale or purchase transaction within six months of the submission for approval of the contract, instruction or plan and the contract, instruction or plan submitted provides for a purchase or sale respectively, the contract, instruction or plan will likely not be approved, (i.e. if the director or officer has sold shares within the

last six months, a contract, instruction or plan that provides for purchases will not be approved);

9. The contract, instruction or plan may be terminated, revoked or amended only during a window period; and

10. The contract, instruction or plan must be of finite duration, and, in any event, not longer than one year, subject to renewal only during a window period with the Company's approval.

Proposed contracts, instructions or plans will not be prepared by the Company. Proposed contracts, instructions or plans and any required notices to the Company pursuant hereto shall be submitted to **the Company's Chief Financial Officer and Treasurer** or **Compliance Officer,** or to **the Company's Controller (as backup)**. Approval or disapproval of any proposed contracts, instructions or plans shall be solely for the benefit of and solely within the discretion of the Company for purposes of assuring compliance with this Statement of Policy.

**Review and approval of any contract, instruction or plan is not intended to assure or guarantee compliance with Rule 10b5-1, which is solely the responsibility of each individual director, officer and employee. Accordingly, you must consult with your own advisors in connection with the preparation of any such contact, instruction or plan.**

*Summary of SEC Rule 10b5-1.*
Pursuant to 17 CFR 240.10b5-1 an individual may purchase securities when in the possession of material inside information, i.e. outside of the Company's window periods, under certain limited circumstances. Such a transaction will not be deemed to be made on the basis of material nonpublic information if, before becoming aware of the material nonpublic information, the individual:

1. enters into a binding contract to purchase or sell the security;
2. instructs another person to buy the security for the insider's account; or
3. adopts a written plan for purchasing securities.

In any case to which the exception is to apply, three things must occur:

1. The contract, instruction or plan must:
    - specify the amount of securities to be purchased or sold, indicate the price at which the securities are to be purchased or sold and indicate the date on which the securities are to be purchased or sold; or
    - include a written formula, algorithm or computer program to determine the amount of securities to be purchased or sold the price at which the securities are to be purchased or sold and the date on which the securities are to be purchased;

2. The contract, instruction or plan must:
    - begin after a "cooling-off" period. For directors and executive officers, this cooling-off period is the later of (i) 90 days after the adoption or modification of the 10b5-1 plan or (ii) two business days following the filing of a Form 10-Q or Form 10-K, as applicable, for the Company's financial results for the fiscal quarter in which the 10b5-1 plan was adopted or modified (but in no case can disclosure exceed 120 days

following plan adoption or modification). For persons who are not directors or executive officers, this cooling-off period is 30 days after adoption or modification of the10b5-1 plan. The cooling-off period does not apply to Company repurchases;

- contain a certification from directors or officers of the Company that on the date of adoption or modification of the 10b5-1 plan that (1) they are not aware of any material non-public information about the security or the Company; and (2) they are adopting the 10b5-1 plan in good faith and not as part of a plan or scheme to evade Section 10(b) of the Exchange Act and Rule 10b-5;
- not permit the insider to exercise any subsequent influence over how, when or whether to effect purchases or sales; and
- if the contract, instruction or plan does permit the insider to exercise any subsequent influence over how, when or whether to effect purchase or sale, and such influence is exercised, the influence must be exercised at a time when the insider was not aware of the material inside information i.e., during window periods; and,

3. The purchase or sale that occurred was pursuant to the contract, instruction or plan and was conducted in good faith.

Where the contract, instruction or plan must specify the amount of securities to be purchased or sold, the amount may be either a specified number of shares or a specified dollar value of the securities.

Where the contract, instruction or plan must specify the price, the price may be either the market price on a particular day, a limit price or a particular dollar price.

Where the contract, instruction or plan must specify the date, if the price is set as a market order, the date must be on the specific day of the year on which the order is to be executed or as soon thereafter as is practicable under ordinary principles of best execution. If the order is a limit order, the date is a day of the year on which the limit order is in place.

Any questions regarding this statement should be referred to the Company's Chief Financial Officer and Treasurer or Compliance Officer, the compliance officers for this policy.

Please sign the acknowledgement on the next page to confirm that you have read and understand this Statement of Company Policy and procedures and that you agree to follow its requirements: the signed acknowledgement should be returned to the Company's Compliance Officer.

This statement will be updated and recirculated from time to time.

Lake Shore Bancorp, Inc.

# Stock Trading and Insider Information Policy
# Director, Officer and Employee Signature Page

Name: ____________________________________________________

Position: __________________________________________________

I have read and understand the Lake Shore Bancorp, Inc. Statement of Company Policy Regarding Confidential Information and Stock and Securities Trading by Directors, Officers and Employees dated [_____], and will follow its requirements.

Date: ____________________ ________________________

[Signature]

**Exhibit 21.1**

## Subsidiaries of Lake Shore Bancorp, Inc.

| Company | Percent Owned |
| --- | --- |
| Lake Shore Savings Bank | 100.0% by Lake Shore Bancorp, Inc. |

**Exhibit 23.1**

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in Registration Statements on Form S-8 (No. 333-141829, 333-185624, and 333-284686) of Lake Shore Bancorp, Inc. of our report dated March 14, 2025, relating to the consolidated financial statements appearing in this Annual Report on Form 10-K of Lake Shore Bancorp, Inc. for the year ended December 31, 2024.

/s/ Yount, Hyde & Barbour, P.C.

Winchester, Virginia
March 14, 2025

Exhibit 23.2

**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, No. 333-185624 and No. 333-284686) of Lake Shore Bancorp, Inc. and subsidiary of our report dated March 22, 2024, relating to the consolidated financial statements as of December 31, 2023, which appears in this annual report on Form 10-K for the year ended December 31, 2024.

/s/ Baker Tilly US, LLP

Pittsburgh, Pennsylvania
March 14, 2025

**Exhibit 31.1**

**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 14, 2025

/s/ Kim C. Liddell
Kim C. Liddell
President and Chief Executive Officer

**Exhibit 31.2**

**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 14, 2025

/s/ Taylor M. Gilden
Taylor M. Gilden
Chief Financial Officer and Treasurer

**Exhibit 32.1**

**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, 2024, 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 14, 2025

/s/ Kim C. Liddell
Kim C. Liddell
President and Chief Executive Officer

**Exhibit 32.2**

**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, 2024, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Taylor M. Gilden, Chief Financial Officer and Treasurer 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 14, 2025

/s/ Taylor M. Gilden
Taylor M. Gilden
Chief Financial Officer and Treasurer

# 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 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