

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549

SCHEDULE 14A

**Proxy Statement Pursuant to Section 14(a) of the
Securities Exchange Act of 1934
(Amendment No. __)**

Filed by the Registrant

Filed by a Party other than the Registrant

Check the appropriate box:

- Preliminary Proxy Statement
- Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))**
- Definitive Proxy Statement
- Definitive Additional Materials
- Soliciting Material Pursuant to §240.14a-12

LAKE SHORE BANCORP, INC.

(Name of Registrant as Specified In Its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

- No fee required.
 - Fee paid previously with preliminary materials.
 - Fee computed on table in exhibit required by Item 25(b) per Exchange Act Rules 14a-6(i)1 and 0-11
-



April 11, 2024

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 22, 2024 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 and one director for a one 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, 2024; and
- transaction of such other business as may properly come before the 2024 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, 2024, 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



NOTICE OF ANNUAL MEETING OF SHAREHOLDERS

Date: May 22, 2024
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 One directors to serve until the 2027 annual meeting and one Class Two director to serve until the 2025 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, 2024.
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 April 4, 2024, 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, 2024

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.



**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 2024 Annual Meeting of Shareholders of Lake Shore Bancorp, Inc. We refer to Lake Shore Bancorp, Inc. in this proxy statement 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, 2024, 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 2023 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 22, 2024, 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 One directors to serve until the 2027 Annual Meeting and the election of one Class Two director to serve until the 2025 Annual Meeting. Upon the recommendation of the Nominating and Corporate Governance Committee, the following four candidates have been nominated by our Board of Directors:

Class One Directors

- John P. McGrath
- Ronald J. Passafaro
- Kim C. Liddell

Class Two Director

- 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, 2024; 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 April 4, 2024 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 April 4, 2024, there were 5,684,784 shares outstanding, of which 3,636,875 of those shares, or 64.0%, 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 April 4, 2024 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 April 4, 2024, Lake Shore, MHC owned 64.0% 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, 2024.

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 April 4, 2024, 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 April 4, 2024. "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 125 East Fourth Street Dunkirk, NY 14048	3,636,875 ⁽²⁾	64.0%

(1) Calculated on the basis of 5,684,784 shares of common stock, the total number of shares of common stock outstanding as of April 4, 2024.

(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 April 4, 2024. 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	15,546 ⁽³⁾	—	*
Michelle M. DeBergalis, Director	914	—	*
Taylor M. Gilden, Chief Financial Officer and Treasurer	1,000 ⁽⁴⁾	—	*
Kim C. Liddell, President, Chief Executive Officer and Director	30,749 ⁽⁵⁾	—	*
John P. McGrath, Director	24,352 ⁽⁶⁾	—	*
Jack L. Mehlretter, Director	7,298	—	*
Ronald J. Passafaro, Director	7,478 ⁽⁷⁾	—	*
Kevin M. Sanvidge, Chairman of the Board	26,000 ⁽⁸⁾	10,749	*
Ann M. Segarra, Director	—	—	*
Jeffrey M. Werdein, Executive Vice President, Commercial Division	38,005 ⁽⁹⁾	17,073	*
All directors and executive officers as a group (10 persons)	151,342 ⁽¹⁰⁾	27,822	2.6%

* Less than 1.00% of common stock outstanding.

- (1) These options are exercisable within 60 days of April 4, 2024. They cannot be voted until exercised.
- (2) Percentages with respect to each person or group of persons have been calculated on the basis of 5,712,606 shares of common stock, the total number of shares of common stock outstanding as of April 4, 2024, plus the number of shares that each person or group of persons have the right to acquire within 60 days of April 4, 2024.
- (3) Includes 350 shares held by Ms. Brautigam's spouse.
- (4) All shares are held in Mr. Gilden's individual retirement account.
- (5) All shares are held in Mr. Liddell's individual retirement account.
- (6) Includes 22,088 shares held in Mr. McGrath's individual retirement account.
- (7) Includes 1,800 shares held in Mr. Passafaro's individual retirement account.
- (8) Includes 905 shares held as custodian for his grandchildren.
- (9) Includes 4,530 shares held in Lake Shore Bancorp's Employee Stock Ownership Plan over which Mr. Werdein has sole voting power and no investment power.
- (10) Includes 4,530 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 167,805, or 2.9% 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 (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 four 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⁾	Term Expires	Class	Position(s) Held With Lake Shore Bancorp	Director Since
Director Nominees					
John P. McGrath	69	2027	One	Director	2019
Ronald J. Passafaro	63	2027	One	Director	2019
Kim C. Liddell	63	2027	One	President, CEO & Director	2023
Ann M. Segarra	57	2025	Two	Director	2023
Directors Continuing in Office					
Sharon E. Brautigam ⁽²⁾	67	2025	Two	Vice Chairperson of the Board	2004
Michelle M. DeBergalis	57	2026	Three	Director	2022
Jack L. Mehlretter	65	2026	Three	Director	2016
Kevin M. Sanvidge	68	2025	Two	Chairman of the Board	2012

⁽¹⁾ As of April 4, 2024.

⁽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

Kim C. Liddell, President and CEO

Board Committees: Loan (Chair), Chairman's Compliance Committee

Mr. Liddell became President and Chief Executive Officer of Lake Shore, MHC, Lake Shore Bancorp and Lake Shore Savings Bank in April 2023. Previously, Mr. Liddell served as Director of BV Financial, Inc. and Bay Vanguard Bank, headquartered in Baltimore, Maryland, from 2020 to 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.

John P. McGrath

Board Committees: Audit, Enterprise Risk, Loan, Chairman's Compliance Committee

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.

Ronald J. Passafaro

Board Committees: Compensation (Chair), Nominating and Corporate Governance, Chairman's Compliance Committee

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.

Ann M. Segarra

Board Committees: Audit (Chair), Enterprise Risk, Chairman's Compliance Committee

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

Sharon E. Brautigam, Vice Chairperson of the Board

Board Committees: Nominating & Corporate Governance (Chair), Compensation, Chairman’s Compliance

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.

Michelle M. DeBergalis

Board Committees: Compensation, Nominating & Corporate Governance, Chairman’s Compliance Committee

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.

Jack L. Mehlretter

Board Committees: Enterprise Risk (Chair), Audit, Loan, Chairman's Compliance Committee

Mr. Mehlretter retired from his position as Vice President of Information Technology for Gibraltar Industries, a leading manufacturer and distributor of building products for the industrial, infrastructure and residential markets, in 2022. He had held this position since January 2017. During 2016, Mr. Mehlretter 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. Mehlretter 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. Mehlretter's experience in information technology, strategic planning and business management makes him qualified to serve as a director of the Company.

Kevin M. Sanvidge, Chairman of the Board

Board Committees: Chairman's Compliance Committee (Chair), 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.

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 three special meetings during 2023. 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 2023 Annual Meeting of Shareholders.

COMPENSATION OF DIRECTORS

Director Compensation

Meeting Fees. We pay a fee to each of the non-employee directors for attendance at Board of Directors meetings. On each meeting date, the board members are required to attend a board meeting for Lake Shore Savings Bank, as well as Lake Shore Bancorp, Inc. and Lake Shore, MHC, if there are agenda items up for discussion. There are no director meeting fees for Board meetings attended other than annual retainers. The annual retainer for the Chairman of the Board of Directors was \$57,300. The Chairperson of each board committee received an annual retainer of \$6,000, with the exception of the Audit, Enterprise Risk, and Chairman's Compliance Committee Chairpersons, who received an annual retainer of \$10,000. The annual retainer for committee members of the Compensation, Loan, and Nominating and Corporate Governance Committees was \$3,000. The annual retainer for committee members of the Audit, Enterprise Risk, and Chairman's Compliance Committees was \$5,000. Members of the Board of Directors who are also employees do not receive director fees. 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 does receive an annual retainer of \$10,000.

Supplemental Benefit Plans for Non-Employee Directors. Lake Shore Savings entered into a supplemental benefit plan in 2001 with each of its then non-employee directors. This plan, as amended, 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. This plan includes each of the current non-employee directors, with the exception of Ms. DeBergalis, Mr. McGrath, Mr. Passafaro, and Ms. Segarra.

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

Non-employee directors are granted awards under the Equity Plans for the purpose of aligning non-employee director interests with shareholder interests and to aid in the retention of such directors. The allocation of awards to non-employee directors may be made based on the director's responsibilities and years of service at the time of grant. Directors who hold the title of chairperson or vice-chairperson, or who were a committee chairperson, may receive a greater allocation of awards than those who did not hold such positions. The grant of awards to non-employee directors may also be made in lieu of cash compensation that would otherwise be paid as director fees in order to further align the non-employee director interests with shareholder interests.

Director Compensation Table. The following table sets forth information regarding compensation earned by our non-employee directors during the 2023 fiscal year.

Name	Fees Earned or Paid in Cash (\$) ⁽¹⁾	Stock Awards (\$) ⁽²⁾⁽⁴⁾	Option Awards (\$) ⁽³⁾⁽⁴⁾	Non-qualified Deferred Compensation Earnings	All Other Compensation (\$) ⁽⁵⁾	Total (\$)
Tracy S. Bennett, CPA ⁽⁶⁾	\$ 49,450	\$ 13,835	\$ —	\$ —	\$ —	\$ 63,285
Sharon E. Brautigam	\$ 45,450	\$ 12,365	\$ —	\$ —	\$ —	\$ 57,815
Michelle M. DeBergalis	\$ 35,950	\$ 10,300	\$ —	\$ —	\$ —	\$ 46,250
John P. McGrath	\$ 49,450	\$ 13,616	\$ —	\$ —	\$ —	\$ 63,066
Jack L. Mehlretter	\$ 54,450	\$ 13,642	\$ —	\$ —	\$ —	\$ 68,092
Ronald J. Passafaro	\$ 40,450	\$ 11,732	\$ —	\$ —	\$ —	\$ 52,182
Kevin M. Sanvidge	\$ 73,950	\$ 18,492	\$ —	\$ —	\$ —	\$ 92,442
Ann M. Segarra ⁽⁷⁾	\$ 8,200	\$ —	\$ —	\$ —	\$ —	\$ 8,200

(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 (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 2023 Annual Report on Form 10-K filed with the SEC. The restricted stock awards are paid in lieu of cash director fees in order to align director interests with shareholder interests. The restricted stock awards are approximately equal to 30% of the 2022 director fees.

(3) In 2023, the directors did not receive a grant of stock options.

(4) The aggregate number of outstanding restricted stock awards and option awards as of December 31, 2023 was as follows:

Name	Unvested Stock Awards	Options Exercisable	Options Unexercisable
Tracy S. Bennett, CPA ⁽⁶⁾	—	8,220	—
Sharon E. Brautigam	—	—	—
Michelle M. DeBergalis	—	—	—
John P. McGrath	—	—	—
Jack L. Mehlretter	—	—	—
Ronald J. Passafaro	—	—	—
Kevin M. Sanvidge	—	10,749	—
Ann M. Segarra ⁽⁷⁾	—	—	—

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

(6) Mr. Bennett retired from the Board of Directors effective December 31, 2023. He has the ability to exercise his vested stock options up to one year following his retirement date, or the options are forfeited.

(7) Ms. Segarra joined the Board of Directors on November 1, 2023 and the amount shown in the above table reflects the fees earned from November 1, 2023 through December 31, 2023.

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.

The table below notes independent directors and committee assignments in 2023. 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	Bennett ⁽²⁾	Brautigam	DeBergalis	Liddell ⁽³⁾	McGrath	Mehlretter	Passafaro	Reininga ⁽⁴⁾	Segarra ⁽⁵⁾	Sanvidge
Audit	C				X	X			X	
Enterprise Risk	X				X	C			X	
Compensation		X	X				C			X
Nominating & Corporate Governance		C	X				X			
Asset Liability ⁽¹⁾	X		X		C			X		
Chairman's Compliance	X	X	X	X	X	X	X	X	X	C
Loan	X			C	X	X		C		X
Independence Status	X	X	X		X	X	X		X	X

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

(1) The Asset Liability Committee was transitioned to Management during Q1 2023 and reported to the Board of Directors on a monthly basis.

- (2) Mr. Bennett retired from the Board of Directors effective December 31, 2023.
- (3) Mr. Liddell was appointed as President, CEO, and Director effective April 19, 2023 by the Company's Board of Directors.
- (4) Mr. Reininga retired as President, CEO and Director effective March 10, 2023. As such, his independence status was not reviewed subsequent to his departure as of December 31, 2023.
- (5) Ms. Segarra was appointed to the Company's Board of Directors effective October 27, 2023.

Mr. Kim C. Liddell was not an independent director because he was the President and CEO of the Company in 2023.

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.

For 2023, our Board of Directors had determined that Mr. Bennett qualified as an "audit committee financial expert" as defined in Item 407(d)(5) of Regulation S-K. For 2024, our Board of Directors has determined that Ms. Segarra qualifies as an "audit committee financial expert" as defined in Item 407(d)(5) of Regulation S-K. The Audit Committee has chosen Ms. Segarra to serve as the "financial expert" on behalf of the Company for 2024. The Audit Committee met eleven times during 2023.

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 401K and ESOP plan, as well as incentive plans and stock compensation plans.

The Compensation Committee engaged an independent compensation consultant, McLagan of Aon Plc ("McLagan"), to conduct an analysis of director fees for 2023. Based on this information, the Compensation Committee decided on the meeting fees disclosed herein in the *Meeting Fees* section above for 2023.

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 American Bankers Compensation and Benefits survey and information provided from the Compensation Committee's independent compensation consultant, the Compensation Committee also obtains the CEO's recommendation for proposed salary increases and incentive goals for the named executive officers (other than the President and CEO). 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 Lake Shore Savings' performance in the prior year, Lake Shore Savings' strategic plans and goals for the future, and position scope (for positions other than the President and CEO) 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 2023.

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 2023.

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, 2024, 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 Nominating and Corporate Governance Committee intends to fully comply with NASDAQ and regulatory requirements regarding Board diversity. 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.”*

Board Composition

The Company believes in the benefits that diversity brings to the Board of Directors. Based upon voluntary self-identification by each member of the Company’s Board of Directors, the diversity composition of the Board of Directors for the current year is disclosed as follows:

Board Diversity Matrix (as of April 4, 2024)

Total Number of Directors: 8				
	Female	Male	Non-Binary	Did Not Disclose Gender
Part I: Gender Identity				
Directors	3	5	–	–
Part II: Demographic Background				
African American or Black	–	–	–	–
Alaskan Native or Native American	–	–	–	–
Asian	–	–	–	–
Hispanic or Latinx	–	–	–	–
Native Hawaiian or Pacific Islander	–	–	–	–
White	3	4	–	–
Two or More Races or Ethnicities	–	–	–	–
LGBTQ+	–			
Did Not Disclose Demographic Background	1			

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.

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 Taylor M. Gilden, 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	63	2023	President, Chief Executive Officer, and Director
Jeffrey M. Werdein	57	2014	Executive Vice President - Commercial Division
Taylor M. Gilden	33	2023	Chief Financial Officer and Treasurer

⁽¹⁾ As of April 4, 2024.

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 June 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

Annual Incentive Plan. Lake Shore Bancorp provides performance-based bonuses to its 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 CEO, 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 Plan. Lake Shore Savings entered into a supplemental benefit plan with Jeffrey M. Werdein Executive Vice President, Commercial Division, of the Company and 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 Bank, to remain in the employ of the 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 the 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. Subject to regulatory approval, 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 Lake Shore Savings and have attained age 21. Lake Shore Bancorp loaned the Employee Stock Ownership Plan Trust sufficient funds to purchase a number of shares equal to 8% of the shares sold in Lake Shore Bancorp's stock offering to persons other than Lake Shore, MHC, or 238,050 shares. These shares were purchased in the open market following completion of the offering at prevailing market prices.

Although contributions to the plan are discretionary, Lake Shore Savings intends to contribute enough money each year to make the required principal and interest payments on the loan from Lake Shore Bancorp. 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 anticipate that 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. For example, if a participant's compensation for a year represents 1% of the total compensation of all participants for the year, the plan would allocate to that participant 1% of the shares released 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 for shares in their individual accounts.

401(k) Defined Contribution Plan. The Lake Shore Savings tax-qualified 401(k) defined contribution plan is maintained for employees who have completed three months of service 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 Company makes a matching contribution equal to 40% of the eligible employee's salary deferral, up to 6% of such employee's compensation after one year of service. For the profit sharing component, the Company makes a discretionary contribution, up to 5.1% of an eligible employee's salary, depending on years of service. Lastly, the Company contributes 3.4% of an eligible employee's salary based on years of service, which is a discretionary contribution to the Safe Harbor component of the plan. Effective March 1, 2024, the aforementioned plan eligibility was changed to be maintained for employees on the first month following their initial date of employment and attained age 21. Additionally, the Company's matching contribution was adjusted to take effect immediately once an employee is eligible to participate.

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.

Upon the exercise of an option, the exercise price of the option must be paid in full. Payment may be made in cash, with common stock of Lake Shore Bancorp already owned by the option holder, shares to be acquired by the option holder upon exercise of the option or such other consideration as the Compensation Committee authorizes. If the option is not exercised during its term, it will expire.

2012 Equity Incentive Plan. The Lake Shore Bancorp, Inc. 2012 Equity Incentive Plan (the "Equity Incentive Plan") provides officers, employees and directors of Lake Shore Bancorp and Lake Shore Savings with incentives to promote our growth and performance and shareholders approved the Equity Incentive Plan at the 2012 Annual Shareholders Meeting.

The Equity Incentive Plan authorizes the issuance of up to 180,000 shares of our common stock pursuant to grants of restricted stock awards and up to 20,000 shares of our common stock pursuant to grants of incentive stock options and non-qualified stock options, subject to permitted adjustments for certain corporate transactions. Employees and directors of Lake Shore Bancorp or its subsidiaries are eligible to receive awards under the Equity Incentive Plan, except that non-employees may not be granted incentive stock options.

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. Reininga, Mr. Werdein, Ms. Foley, and Mr. Gildea. Mr. Reininga and Ms. Foley were no longer with the organization as of December 31, 2023, however they were named executive officers during the year. Therefore, their respective information was disclosed herein.

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, 2023 and 2022. Each individual listed in the table below is referred to as a named executive officer or NEO.

Name and Principal Position(s)	Year	Salary ⁽²⁾ (\$)	Bonus (\$)	Stock Awards ⁽³⁾ (\$)	Option Awards ⁽⁴⁾ (\$)	Non-Equity Incentive Plan Compensation ⁽⁵⁾ (\$)	All Other Compensation ⁽⁶⁾ (\$)	Total (\$)
Kim C. Liddell ⁽¹⁾ President and Chief Executive Officer	2023	\$ 370,178	\$ -	\$ -	\$ -	\$ 110,404	\$ 87,675	\$ 568,257
Jeffrey M. Werdein ⁽²⁾ Executive Vice President, Commercial Division	2023	269,757	-	-	-	43,075	82,813	395,645
Taylor M. Gilden ⁽⁷⁾ Chief Financial Officer and Treasurer	2022	259,476	-	46,376	-	118,207	73,170	497,229
Daniel P. Reininga ⁽²⁾ Former President and Chief Executive Officer	2023	139,423	-	-	-	46,500	27,379	213,302
Rachel A Foley ⁽⁸⁾ Former Chief Operating Officer	2023	141,836	-	-	-	-	23,844	165,680
	2022	388,036	-	86,065	-	27,754	78,088	579,943
	2023	248,666	-	-	-	-	43,111	291,777
	2022	224,784	-	39,046	-	27,136	53,350	344,316

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

(2) Mr. Werdein served as Interim Principal Executive Officer commencing on March 10, 2023, the date Mr. Reininga retired as President and Chief Executive Officer, and ending on April 19, 2023 when Mr. Liddell was appointed President, Chief Executive Officer and Director.

(3) This column shows the grant date fair value of performance-based 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 2023 Annual Report on Form 10-K filed with the SEC. For 2023, no stock awards were issued. Refer to the *Outstanding Equity Awards at Fiscal Year End* table below for additional information regarding restricted stock awards.

(4) There were no awards of stock options to named executive officers during 2023 or 2022.

(5) 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.

Mr. Liddell, Mr. Werdein, Mr. Gilden, Mr. Reininga, and Ms. Foley received 20.1%, 16.0%, 18.6%, 0.0%, and 0.0%, respectively, of base salary in 2023. Mr. Reininga and Ms. Foley did not receive non-equity incentive compensation in 2023 due to their respective departures from the Company.

(6) For 2023, the amounts in this column reflect what the Company 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 Reimbursements (\$)	Dividends On Unvested Stock Awards (\$)	Life Insurance Premiums in excess of \$50,000 (\$)	Perquisites ^(b) (\$)	Total (\$)
Liddell	2023	—	—	—	—	792	86,883	87,675
Werdein	2023	35,970	9,768	1,197	—	774	35,104	82,813
Gilden	2023	—	—	—	—	72	27,307	27,379
Reininga	2023	10,184	—	—	—	572	13,088	23,844
Foley	2023	30,752	—	—	—	774	11,585	43,111

- (a) Represents the value of the shares of common stock allocated in 2023 to each named executive officer's ESOP account based on a fair market value of \$11.71 per share, which was the closing price of the Company's common stock at fiscal year-end 2023.
- (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 \$40,440 for housing and transportation, \$29,363 reimbursement of taxes for fringe benefits, and \$17,080 for country club dues. The non-cash perquisites and personal benefits for Mr. Werdein in 2023 included a \$12,000 car allowance stipend, \$14,302 for country club dues, and \$8,802 reimbursement of taxes for club dues. The non-cash perquisites for Mr. Gilden included \$16,394 for housing and transportation and \$10,913 reimbursement of taxes for fringe benefits. The non-cash perquisites for Mr. Reininga in 2023 included tax reimbursements of \$8,011 and \$5,077 for reimbursement of business expenses. The non-cash perquisites for Ms. Foley in 2023 included a \$11,585 car allowance stipend.
- (7) Ms. Foley resigned as Chief Operating Officer on December 11, 2023.
- (8) 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.

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, 2023.

Name	Option Awards ⁽¹⁾				Stock Awards			
	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 (#)	Market Value of Shares or Units of Stock That Have Not Vested (\$)	Equity Incentive Plan Awards: Number of Unearned Shares, Units, or Other Rights That Have Not Vested (#)(2)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested (\$)(3)
Kim C. Liddell	—	—	—	—	—	—	—	—
Jeffrey M. Werdein	17,073	—	\$ 14.38	10/21/2026	—	—	5,142	\$ 60,213
Taylor M. Gilden	—	—	—	—	—	—	—	—
Daniel P. Reininga ⁽⁴⁾	30,800	—	\$ 14.38	10/21/2026	—	—	—	—
Rachel A. Foley	—	—	—	—	—	—	—	—

(1) The option awards granted to Mr. Reininga and Mr. Werdein in 2016 were 100% vested on October 21, 2021.

(2) Represents the number of shares that could be earned if a performance metric is attained. The performance metric is based on a three-year average percentage of delinquent loans to total loans, and if this performance metric is attained, the number of shares shown in the table above, will vest as follows: (i) shares awarded in 2021 will vest in February 2024 if the performance metric is attained, and (ii) shares awarded in 2022 will vest in February 2025 if the performance metric is attained.

	2021 Award	2022 Award	2023 Award	Total Outstanding
Liddell	—	—	—	—
Werdein	2,042	3,100	—	5,142
Gilden	—	—	—	—
Reininga*	—	—	—	—
Foley**	—	—	—	—

* In connection with Mr. Reininga's retirement in March 2023, he forfeited all of the stock-based awards granted to him in 2021 and 2022.

** In connection with Ms. Foley's resignation in December 2023, she forfeited all of the stock-based awards granted to her in 2021 and 2022.

- (3) Market value is calculated on the basis of \$11.71 per share, which was the closing sales price for our common stock on the NASDAQ Stock Market on December 31, 2023.
- (4) Mr. Reininga retired from his position as President and Chief Executive Officer on March 10, 2023 and the vested stock options are exercisable for one year following his retirement date.

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:

Year	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
	Liddell (\$)(1)	Reininga (\$)(1)	Werdein (\$)(1)	Liddell (\$)(1)(2)	Reininga (\$)(1)(2)	Werdein (\$)(1)(2)	(\$)(3)	(\$)(3)(4)	(\$)	(\$)
2023	568,257	165,680	395,645	568,257	43,602	392,907	252,540	226,038	90	4,820,000
2022	—	579,943	—	—	539,517	—	420,773	401,931	93	5,708,000
2021	—	588,912	—	—	588,442	—	372,865	374,869	115	6,187,000

- (1) For 2023, our PEO is Mr. Liddell, and 2023 includes our two former PEOs: Mr. Werdein (March 10, 2023 - April 18, 2023) and Mr. Reininga (January 1, 2023 - March 10, 2023). Our PEO for 2021 and 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, Mr. Reininga, and Mr. Werdein’s respective 2023 total compensation to determine the 2023 compensation actually paid:

	2023		
	Liddell	Reininga	Werdein
Total Compensation as reported in Summary Compensation Table (SCT)	\$ 568,257	\$ 165,680	\$ 395,645
Less: Fair value of equity awards reported in SCT	—	—	—
Fair value of equity awards (restricted stock and stock options) granted in current year—value at end of year-end	—	—	—
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	—	(1,849)	(887)
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	—	—	(1,851)
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 *	—	(120,229)	—
Compensation Actually Paid	\$ 568,257	\$ 43,602	\$ 392,907

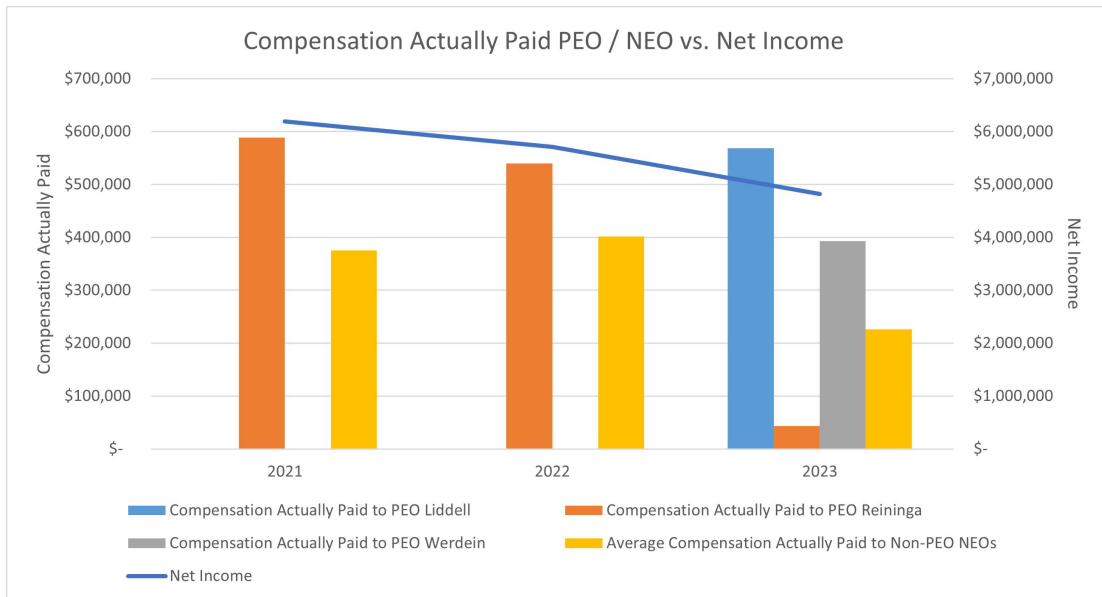
*Mr. Reininga retired from his position as President and Chief Executive Officer on March 10, 2023. As a result of his retirement, any shares of restricted stock that remained unvested as of his retirement were forfeited. He may exercise his vested stock options for one year following his retirement date, or the options would be forfeited.

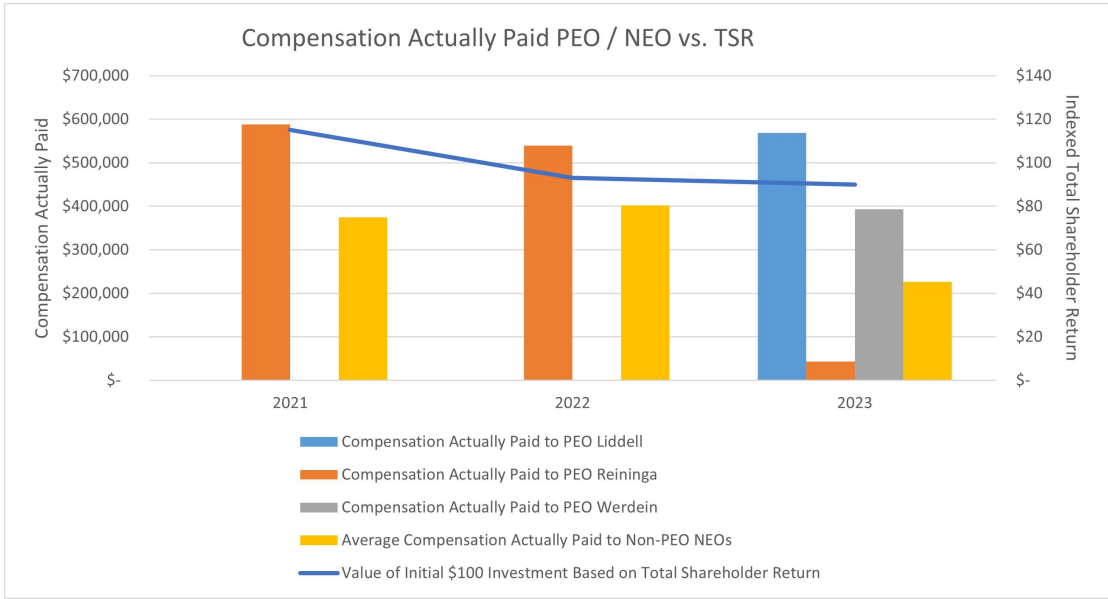
(3) In 2023, the non-PEO NEOs included Taylor Gilden, Chief Financial Officer and Treasurer, and Rachel Foley, Chief Operating Officer. Mr. Gilden joined the Company on June 5, 2023 as the Chief Strategy Officer. On August 1, 2023, Mr. Gilden was appointed as the Chief Financial Officer and Treasurer of the Company. Ms. Foley resigned as Chief Operating Officer on December 11, 2023. As a result of her resignation, any shares of restricted stock that remained unvested as of her date of departure were forfeited. 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:

	2023
	Average Non-PEO NEOs
Total Compensation as reported in SCT	\$ 252,540
Less: Fair value of equity awards reported in SCT	—
Fair value of equity awards granted in current year—value at end of year-end	—
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	(376)
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	—
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	(26,126)
Compensation Actually Paid	\$ 226,038

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:





EQUITY COMPENSATION PLAN INFORMATION

The following table presents certain information regarding our Equity Compensation Plans in effect as of December 31, 2023 (the 2006 Stock Option Plan and 2012 Equity Incentive Plan). The Company had no Equity Compensation Plans not approved by security holders as of December 31, 2023.

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	58,857	\$ 14.38	—
2012 Equity Incentive Plan			52,261
Stock Options	13,101	\$ 14.38	6,899
Total	71,958	\$ 14.38	59,160

**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, 2024, 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. Services provided to the Company and its subsidiary by the Company's prior independent registered public accounting firm, Baker Tilly US, LLP ("Baker Tilly") in 2023 are described under "Principal Accountant Fees and Services" below. Additional information regarding the Audit Committee is provided in the "Audit Committee Report" below.

Change in Independent Registered Public Accounting Firm

The Audit Committee determined it appropriate to review the selection of the Company's independent registered public accounting firm for the fiscal year ending December 31, 2024 and issued a Request for Proposal (the "RFP") to several independent accounting firms to conduct a competitive process to engage an independent registered public accounting firm. As a result of the RFP process and following careful deliberation, on October 17, 2023, the Audit Committee engaged Yount, Hyde & Barbour, P.C. ("YHB") as the Company's independent registered public accounting firm for the Company's fiscal year ending 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 YHB 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 YHB 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.

On October 17, 2023, the Company dismissed 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.

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, 2024.

PRINCIPAL ACCOUNTANT FEES AND SERVICES

The Audit Committee appointed Baker Tilly as our independent registered public accounting firm for the year ended December 31, 2023 and such appointment was ratified by the shareholders of the Company at the Annual Meeting held on May 17, 2023. Baker Tilly has audited our consolidated financial statements since 2005.

Fees Incurred

The following table presents fees paid by the Company in 2023 and 2022 for professional audit and other services provided by Baker Tilly, our independent registered public accounting firm, for those years:

	2023	2022
Audit Fees ⁽¹⁾	\$ 188,934	\$ 191,208
Audit-related fees ⁽²⁾	27,660	25,770
Tax fees ⁽³⁾	—	—
All other fees ⁽⁴⁾	—	—
Total	\$ 216,594	\$ 216,978

(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 2023 and 2022 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 Employee Stock Ownership Plan (ESOP) of Lake Shore Bancorp, Inc., including out-of-pocket expenses.

(3) No tax fees incurred in 2023 or 2022.

(4) No other fees in 2023 or 2022.

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, 2023, 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 2023 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 19, 2024, the Audit Committee of the Board of Directors reviewed and discussed with management the audited consolidated financial statements dated December 31, 2023. The Audit Committee also discussed with Baker Tilly, 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 (the “PCAOB”) and the Securities and Exchange Commission.

The Audit Committee has received from Baker Tilly, the written disclosure and the letter required by applicable requirements of the PCAOB regarding Baker Tilly’s communications with the Audit Committee concerning independence and has discussed Baker Tilly’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, 2023 for filing with the Securities and Exchange Commission.

Lake Shore Bancorp, Inc. Audit Committee

Ann M. Segarra, Chairperson
Jack L. Mehlretter
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, 2023, we believe that all Section 16(a) filing requirements applicable to our executive officers and directors during 2023 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 2025 Annual Meeting

If you wish to submit proposals to be included in our proxy statement for the 2025 Annual Meeting of shareholders, we must receive them on or before December 12, 2024, 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 2025 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 24, 2025.

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, 2024

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.

Your vote matters – here’s how to vote!
 You may vote online or by phone instead of mailing this card.



Votes submitted electronically must be received by May 22, 2024 at 8:30 A.M., Eastern time.

Online

Go to www.envisionreports.com/LSBK or scan the QR code – login details are located in the shaded bar below.



Phone

Call toll free 1-800-652-VOTE (8683) within the USA, US territories and Canada



Save paper, time and money!
Sign up for electronic delivery at www.envisionreports.com/LSBK

Using a **black ink** pen, mark your votes with an **X** as shown in this example. Please do not write outside the designated areas.



2024 Annual Meeting Proxy Card

▼ IF VOTING BY MAIL, SIGN, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼

A Proposals – The Board of Directors recommend a vote FOR all the nominees listed and FOR Proposals 2 and 3.

1. Election of Directors:



	For	Withhold
01 - John P. McGrath	<input type="checkbox"/>	<input type="checkbox"/>
02 - Ronald J. Passafaro	<input type="checkbox"/>	<input type="checkbox"/>
03 - Kim C. Liddell	<input type="checkbox"/>	<input type="checkbox"/>
04 - Ann M. Segarra	<input type="checkbox"/>	<input type="checkbox"/>

- | | For | Against | Abstain |
|--|--------------------------|--------------------------|--------------------------|
| 2. Approve, on an advisory basis, a non-binding resolution regarding the compensation of our named executive officers. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| 3. Ratify the appointment of Yount, Hyde & Barbour, P.C. as the Company's independent registered public accounting firm for the year ending December 31, 2024. | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

B Authorized Signatures – This section must be completed for your vote to count. Please date and sign below.

Please sign exactly as name(s) appears hereon. Joint owners should each sign. When signing as attorney, executor, administrator, corporate officer, trustee, guardian, or custodian, please give full title.

Date (mm/dd/yyyy) – Please print date below.

Signature 1 – Please keep signature within the box.

Signature 2 – Please keep signature within the box.

/ /

1 P C F



2024 Annual Meeting Admission Ticket
2024 Annual Meeting of Lake Shore Bancorp, Inc. Shareholders

May 22, 2024, 8:30 A.M. Eastern Time
Lake Shore Bancorp, Inc., 31 E Fourth Street,
Dunkirk, NY 14048

Upon arrival, please present this admission ticket and photo identification at the registration desk.

Important notice regarding the Internet availability of proxy materials for the Annual Meeting of Shareholders.
The material is available at: www.edocumentview.com/LSBK



▼ IF VOTING BY MAIL, SIGN, DETACH AND RETURN THE BOTTOM PORTION IN THE ENCLOSED ENVELOPE. ▼

Proxy - Lake Shore Bancorp, Inc.



Notice of 2024 Annual Meeting of Shareholders
Proxy Solicited by Board of Directors for Annual Meeting – May 22, 2024

The undersigned shareholder of Lake Shore Bancorp, Inc. (the "Company") hereby appoints Michelle M. DeBergalis and Jack L. Mehlretter, and each of them, with full powers of substitution, to represent and to vote as proxy, as designated, all shares of common stock of Lake Shore Bancorp, Inc. held of record by the undersigned on April 4, 2024, at the Annual Meeting of Shareholders (the "Annual Meeting") to be held at 8:30 a.m., Eastern Time, on May 22, 2024, or at any adjournment or postponement thereof, upon the matters described in the Notice of the Annual Meeting of Shareholders and Proxy Statement, dated April 11, 2024 and upon such other matters as may properly come before the Annual Meeting. The undersigned hereby revokes all prior proxies.

This Proxy, when properly executed, will be voted in the manner directed herein by the undersigned shareholder. **If no direction is given, this Proxy will be voted FOR the election of all nominees listed and FOR proposals 2 and 3.**

The undersigned hereby acknowledges receipt of the Notice of Annual Meeting of Shareholders for the Annual Meeting dated April 11, 2024.

Should the undersigned be present and elect to vote at the Annual Meeting or at any adjournment thereof and after notification to the Secretary of Lake Shore Bancorp, Inc. at the Annual Meeting of the shareholder's decision to terminate this proxy, then the power of said attorneys and proxies shall be deemed terminated and of no further force and effect. This proxy may also be revoked by sending written notice to the Secretary of Lake Shore Bancorp, Inc. at the address set forth on the Notice of Annual Meeting of Shareholders, or by the filing of a later proxy prior to a vote being taken on a particular proposal at the Annual Meeting.

(Items to be voted appear on reverse side)

C Non-Voting Items

Change of Address – Please print new address below.

Comments – Please print your comments below.

Meeting Attendance

Mark box to the right if
you plan to attend the
Annual Meeting.





Online

Go to www.envisionreports.com/LSBK or scan the QR code – login details are located in the shaded bar below.



Votes submitted electronically must be received by May 22, 2024 at 8:30 A.M., Eastern time.

Shareholder Meeting Notice

Important Notice Regarding the Availability of Proxy Materials for the Lake Shore Bancorp, Inc. Annual Shareholders Meeting to be Held on May 22, 2024

Under Securities and Exchange Commission rules, you are receiving this notice that the proxy materials for the annual shareholders' meeting are available on the Internet. Follow the instructions below to view the materials and vote online or request a copy. The items to be voted on and location of the annual meeting are on the reverse side. Your vote is important!

This communication presents only an overview of the more complete proxy materials that are available to you on the Internet. We encourage you to access and review all of the important information contained in the proxy materials before voting. The 2023 annual letter, 2024 proxy statement, and 2023 Form 10-K to shareholders are available at:

www.envisionreports.com/LSBK



Easy Online Access – View your proxy materials and vote.

- Step 1:** Go to www.envisionreports.com/LSBK.
- Step 2:** Click on **Cast Your Vote or Request Materials**.
- Step 3:** Follow the instructions on the screen to log in.
- Step 4:** Make your selections as instructed on each screen for your delivery preferences.
- Step 5:** Vote your shares.

When you go online, you can also help the environment by consenting to receive electronic delivery of future materials.



Obtaining a Copy of the Proxy Materials - If you want to receive a paper copy of the proxy materials, you must request one. There is no charge to you for requesting a copy. Please make your request as instructed on the reverse side on or before May 10, 2024 to facilitate timely delivery.



2 N O T



Shareholder Meeting Notice

Lake Shore Bancorp, Inc.'s Annual Meeting of Shareholders will be held on May 22, 2024 at Lake Shore Bancorp, Inc., 31 E Fourth Street, Dunkirk, NY 14048, at 8:30 a.m. Eastern Time.

Proposals to be voted on at the meeting are listed below along with the Board of Directors' recommendations.

The Board of Directors recommend a vote **FOR** all the nominees listed and **FOR** Proposals 2 and 3:

1. Elect four candidates
 - 01 - John P. McGrath
 - 02 - Ronald J. Passafaro
 - 03 - Kim C. Liddell
 - 04 - Ann M. Segarra
2. Approve, on an advisory basis, a non-binding resolution regarding the compensation of our named executive officers.
3. Ratify the appointment of Yount, Hyde & Barbour, P.C. as the Company's independent registered public accounting firm for the year ending December 31, 2024.

PLEASE NOTE - YOU CANNOT VOTE BY RETURNING THIS NOTICE. To vote your shares you must go online or request a paper copy of the proxy materials to receive a proxy card. If you wish to attend and vote at the meeting, please bring this notice with you.



Here's how to order a copy of the proxy materials and select delivery preferences:

Current and future delivery requests can be submitted using the options below.

If you request an email copy, you will receive an email with a link to the current meeting materials.

PLEASE NOTE: You must use the number in the shaded bar on the reverse side when requesting a copy of the proxy materials.

- **Internet** - Go to www.envisionreports.com/LSBK. Click Cast Your Vote or Request Materials.
- **Phone** - Call us free of charge at 1-866-641-4276.
- **Email** - Send an email to investorvote@computershare.com with "Proxy Materials Lake Shore Bancorp, Inc." in the subject line. Include your full name and address, plus the number located in the shaded bar on the reverse side, and state that you want a paper copy of the meeting materials.

To facilitate timely delivery, all requests for a paper copy of proxy materials must be received by May 10, 2024.
