UNITED STATES SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 14A INFORMATION

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

Filed by a Party other than the Registrant \Box

Filed by the Registrant \boxtimes 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

NSTS 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, 2025

Dear Fellow Stockholder:

The 2025 Annual Meeting of Stockholders of NSTS Bancorp, Inc. will be held at the office of North Shore Trust and Savings at 700 S. Lewis Ave., Waukegan, Illinois on Wednesday, May 21, 2025, at 10:00 a.m., Central Time.

We are furnishing our proxy statement, 2024 Annual Report and proxy card to stockholders over the internet. Our stockholders will receive a notice in the mail which contains instructions on how to access the proxy materials via the internet. By delivering proxy materials electronically to our stockholders, we can reduce the costs of printing and mailing our proxy materials. If you would like to request paper copies of the proxy materials, please follow the instructions on the notice or as provided in the proxy statement.

The Notice of Annual Meeting and Proxy Statement describe the formal business to be transacted at the annual meeting. Our Annual Report on Form 10-K for the year ended December 31, 2024, which contains information concerning our business and 2024 financial performance is available to review at our website at https://ir.northshoretrust.com/sec-filings/all-sec-filings, and is also available online with the Annual Meeting proxy statement materials at https://annualgeneralmeetings.com/nsts2025/. Our directors and officers, as well as a representative of our independent registered public accounting firm, are expected to be present at the annual meeting to respond to any questions that stockholders may have.

The business to be conducted at the annual meeting consists of: (1) the election of directors, (2) the ratification of the appointment of Plante & Moran, PLLC as our independent registered public accounting firm for the year ending December 31, 2025, and (3) a non-binding stockholder proposal that the Company engage an investment banking firm to guide the Company regarding a merger or sale of the Company. The Board of Directors has determined that first two matters described above to be considered at the annual meeting are in the best interest of NSTS Bancorp, Inc. and its stockholders, and the Board of Directors unanimously recommends a vote "FOR" each matter to be considered. With respect to the non-binding stockholder proposal, the Board of Directors encourages stockholders to consider and express their views on the proposal, but takes no position and makes no recommendation on this proposal.

On behalf of the Board of Directors, we urge you to sign, date and return the proxy card, or vote your shares online, as soon as possible to ensure that your shares are represented and voted at the meeting. This will not prevent you from attending the meeting and voting in person, but will assure that your vote is counted if you are unable to attend the annual meeting.

Sincerely,

/s/ Stephen G. Lear Stephen G. Lear Chairman, President & Chief Executive Officer

NSTS Bancorp, Inc. 700 S. Lewis Ave. Waukegan, Illinois 60085 (847) 336-4430

NOTICE OF ANNUAL MEETING OF STOCKHOLDERS

To Be Held on May 21, 2025

Notice is hereby given that the 2025 Annual Meeting of Stockholders of NSTS Bancorp, Inc. (the "Company") will be held at the office of North Shore Trust and Savings located at 700 S. Lewis Ave., Waukegan, Illinois on Wednesday, May 21, 2025 at 10:00 a.m., Central Time.

The annual meeting is for the purpose of considering and acting upon:

1. the election of two directors identified in the Proxy Statement for a term expiring at the 2028 Annual Meeting;

2. the ratification of the appointment of Plante & Moran, PLLC as the Company's independent registered public accounting firm for the year ending December 31, 2025; and

3. a non-binding stockholder proposal recommending the sale or merger of the Company, if properly presented at the Annual Meeting.

Stockholders also will transact any other business that may properly come before the annual meeting, and any adjournment or postponement thereof, as determined by the Board of Directors. The Board of Directors currently is not aware of any other business to come before the annual meeting.

Any action may be taken on the foregoing proposals at the annual meeting on the date specified above, or on the date or dates to which the annual meeting may be adjourned or postponed. Stockholders of record at the close of business on March 24, 2025 are the stockholders entitled to vote at the annual meeting, and any adjournments or postponements thereof.

Important Notice Regarding the Availability of Proxy Materials for the Stockholder Meeting to be Held on May 21, 2025

Pursuant to rules of the Securities and Exchange Commission (the "SEC"), we have elected to provide access to our proxy materials via the internet. Accordingly, we sent a Notice of Internet Availability of Proxy Materials (the "Notice") to our stockholders. The Notice provides stockholders with instructions on how to access and review this Proxy Statement and our 2024 Annual Report online, as well as vote online. We, like many public companies, have determined that providing proxy materials electronically significantly reduces our printing and mailing costs associated with the distribution of printed copies of our proxy materials to our stockholders.

Stockholders who receive the Notice will not receive a printed copy of the proxy materials by mail unless you request one. All stockholders will have the ability to access the proxy materials on the website referred to in the Notice or request to receive a printed set of the proxy materials. Instructions on how to access the proxy materials via the Internet or to request printed copies may be found within the Notice. In addition, stockholders may request to receive proxy materials in printed form by mail or electronically by email on an ongoing basis.

Please submit a proxy as soon as possible so that your shares can be voted at the meeting in accordance with your instructions. You may submit your proxy (1) through the Internet or (2) by completing, signing, dating and returning the proxy card in the enclosed postage-paid envelope by mail. For specific instructions, please refer to the accompanying proxy card. Any stockholder present at the annual meeting may revoke his or her proxy and vote personally on each matter brought before the annual meeting. However, if you are a stockholder whose shares are not registered in your own name, you will need additional documentation from your record holder in order to vote in person at the annual meeting. Attendance at the annual meeting will not in itself constitute revocation of your proxy.

We also are soliciting voting instructions from participants in the North Shore Trust and Savings Employee Stock Ownership Plan ("ESOP") who may direct the ESOP trustee to vote shares on their behalf under the ESOP. We ask each plan participant to sign, date and return the voting instruction card or provide voting instructions through the Internet as described on the Notice and the voting instruction card.

By Order of the Board of Directors,

/s/ Christine E. Stickler

Christine E. Stickler Corporate Secretary

YOUR VOTE IS IMPORTANT

Please vote via the Internet, Telephone or Mail. Internet: https://annualgeneralmeetings.com/nsts2025/ Phone: 1-800-785-7782 and follow the instructions

If you are voting by mailing your proxy card, please mark, sign and date the proxy card when received and return it promptly in the self-addressed, stamped envelope that we have provided.



PROXY STATEMENT OF NSTS BANCORP, INC. 700 S. LEWIS AVENUE WAUKEGAN, ILLINOIS

ANNUAL MEETING OF STOCKHOLDERS

To be held on May 21, 2025

This Proxy Statement is furnished in connection with the solicitation of proxies by the Board of Directors (the "Board" or the "Board of Directors") of NSTS Bancorp, Inc. (the "Company") to be used at the Company's Annual Meeting of Stockholders to be held at the Main Office of North Shore Trust and Savings (the "Bank"), 700 S. Lewis Avenue, Waukegan, Illinois, on May 21, 2025, at 10:00 a.m., Central Time (the "Annual Meeting"). The accompanying Notice of Annual Meeting and this Proxy Statement are being first made available to stockholders on or about April 11, 2025.

At the Annual Meeting, stockholders will consider and vote upon: (1) the election of two directors of the Company to serve a three-year term, (2) the ratification of the appointment of Plante & Moran, PLLC as the Company's independent registered public accounting firm for the fiscal year ending December 31, 2025, and (3) a nonbinding stockholder proposal that the Company engage an investment banking firm to guide the Company regarding a merger or sale of the Company, if properly presented at the Annual Meeting.

VOTING AND PROXY PROCEDURES

Who Can Vote at the Annual Meeting

You are only entitled to vote at the Annual Meeting if our records show that you held shares of our common stock, par value \$0.01 per share (the "Common Stock"), as of the close of business on March 24, 2025 (the "Record Date"). If you wish to attend and vote your shares at the Annual Meeting and your shares are held by a broker or other intermediary, you can only vote your shares at the Annual Meeting if you have a properly executed proxy from the record holder of your shares (or their designee). As of the Record Date, a total of 5,247,826 shares of Common Stock were outstanding. Except as otherwise noted below, each share of Common Stock has one vote on each matter presented. The presence, in person or by proxy, of at least a majority of the total number of shares of Common Stock outstanding and entitled to vote will be necessary to constitute a quorum at the Annual Meeting.

Notice of Internet Availability of Proxy Materials

Pursuant to rules of the SEC, we have elected to provide access to our proxy materials via the internet As a result, beginning on or about April 11, 2025, we mailed to our stockholders a Notice Regarding the Availability of Proxy Materials, which contained instructions on how to access and review our proxy materials, including our 2024 Annual Report on Form 10-K, and vote your shares. We, like many public companies, have determined that providing proxy materials electronically significantly reduces our printing and mailing costs associated with the distribution of printed copies of our proxy materials to our stockholders.

Stockholders who receive the Notice will not receive a printed copy of the proxy materials by mail unless you request oneAll stockholders will have the ability to access the proxy materials on the website referred to in the Notice or request to receive a printed set of the proxy materials. Instructions on how to access the proxy materials via the Internet or to request printed copies may be found within the Notice. In addition, stockholders may request to receive proxy materials in printed form by mail or electronically by email on an ongoing basis.

You may receive more than one Notice if you have multiple holdings reflected in our stock transfer records and/or in accounts with brokers. To vote ALL of your shares by proxy, please follow the instructions and vote your proxy for each account.

Voting by Proxy

The Board of Directors is sending you this Proxy Statement for the purpose of requesting that you allow your shares of Common Stock to be represented at the Annual Meeting by the persons named in the enclosed proxy card. As shown on your proxy card, you may also vote your shares by Internet voting. All shares of Common Stock represented at the Annual Meeting by properly submitted and dated proxies will be voted according to the instructions indicated on the proxy. If you execute a proxy (by any permitted method) without giving voting instructions, your shares will be voted as recommended by the Company's Board of Directors.

The Board of Directors recommends a vote "FOR" its nominees for director and "FOR" the ratification of the appointment of Plante & Moran, PLLC as our independent registered public accounting firm. With respect to the non-binding stockholder proposal, the Board of Directors encourages stockholders to consider and express their views on the proposal, but takes no position and makes no recommendation on this proposal.

The Company does not know of any other matters to be presented at the Annual Meeting. If any matters not described in this Proxy Statement are properly presented at the Annual Meeting, the persons named in the proxy will vote your shares as determined by a majority of the Board of Directors. If the Annual Meeting is postponed or adjourned, your shares of Common Stock may be voted by the persons named in the proxy card on the new Annual Meeting date as well, unless you have revoked your proxy. You may revoke your proxy at any time before the vote is taken at the Annual Meeting. To revoke your proxy you must: (1) advise the Company's Corporate Secretary in writing before your shares of Common Stock have been voted at the Annual Meeting, (2) deliver a later-dated proxy (executed in writing or via the Internet), or (3) attend the Annual Meeting and vote your shares in person. Attendance at the Annual Meeting will not in itself revoke your proxy.

If you hold your Common Stock in "street name," you will receive instructions from your broker, bank or other nominee that you must follow in order to have your shares voted. Your broker, bank or other nominee may allow you to deliver your voting instructions via the Internet.

Please see the instruction form provided by your broker, bank or other nominee that accompanies this Proxy Statement. In order to vote in person at the Annual Meeting, you will need special documentation from your broker, bank or other nominee. Please note that pursuant to the rules that guide how brokers vote your shares of Common Stock, your brokerage firm or other nominee may not vote your shares with respect to the election of directors (Proposal I) or the non-binding stockholder proposal (Proposal III) without specific instructions from you as to how to vote because this matter is not considered a "routine" matter under the applicable rules. Proposal II, the ratification of the appointment of Plante& Moran, PLLC, is a matter we believe will be considered "routine"; accordingly, even if the broker or other nominee does not receive voting instructions from you, the broker or other nominee is entitled to vote your shares in connection with Proposal II.

Solicitation of Proxies; Expenses

We will pay the cost of this proxy solicitation. Our directors, executive officers and other employees may solicit proxies by mail, personally, by telephone, by press release, by facsimile transmission or by other electronic means. No additional compensation will be paid to our directors, executive officers or employees for such services. We will reimburse brokerage firms and other custodians, nominees, and fiduciaries for reasonable expenses incurred by them in sending proxy materials to the beneficial owners of our Common Stock.

Participants in the North Shore Trust and Savings Employee Stock Ownership Plan

If you are a participant in the North Shore Trust and Savings Employee Stock Ownership Plan ("ESOP"), you will receive a voting instruction card that reflects all the shares that you may direct the ESOP trustee to vote on your behalf under the ESOP. Under the terms of the ESOP, the ESOP trustee votes all shares held by the ESOP, but you may direct the trustee how to vote the shares of Common Stock allocated to your ESOP account. The ESOP trustee will vote all unallocated shares of Common Stock held by the ESOP, all allocated shares for which no voting instructions are received and all allocated shares for which participants have voted "abstain" in the same proportion as shares for which it has received timely voting instructions. As of the close of business on the Record Date, 63,247 shares have been allocated to the participants' accounts in the ESOP.

Quorum and Vote Required

Business cannot be transacted at the Annual Meeting unless a quorum is present. The presence in person or by proxy of holders of a majority of the total number of outstanding shares of Common Stock entitled to vote is necessary to constitute a quorum at the Annual Meeting. Abstentions and broker non-votes will be counted for purposes of determining whether a quorum is present. A "broker non-vote" occurs when a broker, bank or other nominee holding shares for a beneficial owner does not have discretionary voting power with respect to the agenda item and has not received voting instructions from the beneficial owner. In the event there are not sufficient shares represented in person or by proxy for a quorum, or to approve or ratify any matter being presented at the time of the Annual Meeting, the Annual Meeting will be adjourned in order to permit further solicitation of proxies.

In voting on the election of directors (Proposal I), you may (i) vote for all the nominees; (ii) vote to withhold for all the nominees; or (iii) vote for all nominees except one or more of the nominees. There is no cumulative voting in the election of directors. Directors are elected by a plurality of the votes cast at the Annual Meeting. This means that the nominees who receive the highest number of votes cast are elected, up to the maximum number of directors to be elected at the Annual Meeting. Votes that are withheld and broker non-votes will have no effect on the outcome of the election.

In voting to ratify the appointment of Plante & Moran, PLLC as our independent registered public accounting firm for the fiscal year ending December 31, 2025 (Proposal II), you may (i) vote for the ratification; (ii) vote against the ratification; or (iii) abstain from voting on such ratification. To be approved, this proposal requires the affirmative vote of a majority of the votes cast at the Annual Meeting. Broker non-votes and abstentions will not be counted as votes cast and will have no effect on the voting on this proposal.

In voting on the non-binding stockholder proposal presented under Proposal III, you may vote for, against or abstain from voting on the proposal. In order to receive the requisite support from stockholders, this proposal requires the affirmative vote of a majority of the votes cast at the Annual Meeting. Broker non-votes and abstentions will not be counted as votes cast and will have no effect on the voting on this proposal. Proxies returned without voting instructions will not be voted on Proposal III.

Under rules applicable to broker-dealers, the proposal to ratify the independent registered public accounting firm is considered a "discretionary" item upon which brokerage firms may vote in their discretion on behalf of their clients if such clients have not furnished voting instructions. The proposal for the election of directors and the non-binding stockholder proposal are each considered "non-discretionary" for which brokerage firms may not vote in their discretion on behalf of clients who do not furnish voting instructions and, thus, there may be broker non-votes at the Annual Meeting. You should use the proxy card provided by the institution that holds your shares to instruct your broker how to vote your shares, or submit your vote online by following the instructions on the proxy card, to avoid your shares being considered broker nonvotes.

Limitation on Voting

Our Certificate of Incorporation provides that in no event will any person who beneficially owns more than 10% of the then-outstanding shares of Common Stock be entitled or permitted to vote any of the shares of Common Stock held in excess of the 10% limit.

Important Notice Regarding Internet Availability of Proxy Materials For the Stockholder Meeting to be Held on May21, 2025

This Proxy Statement and the Company's Annual Report on Form 10-K for the year ended December 31, 2024 (the "2024 Annual Report") are each available at https://ir.northshoretrust.com/sec-filings/all-sec-filings.

PROPOSAL I – ELECTION OF DIRECTORS

Our Board of Directors is comprised of six members. Our Certificate of Incorporation provides that directors are divided into three classes, with one class of directors elected annually. Two directors have been nominated for election at the Annual Meeting to serve for a three-year period and until their respective successors will have been elected and qualified. The Board of Directors has nominated Emily E. Ansani and Thomas M. Ivantic, each to serve as a director for a three-year term expiring in 2028. Each nominee is currently a director of NSTS Bancorp, Inc. and has agreed to serve as a director if elected.

It is intended that the proxies solicited on behalf of the Board of Directors (other than proxies in which the vote is withheld as to any nominee) will be voted at the Annual Meeting for the election of the proposed nominees. If a nominee is unable to serve, the shares represented by all such proxies will be voted for the election of such substitute as the Board of Directors may determine. At this time, the Board of Directors knows of no reason why any of the nominees might be unable to serve, if elected. Except as indicated herein, there are no arrangements or understandings between any nominee or continuing director and any other person pursuant to which such nominee or continuing director was selected.

The following sets forth certain information regarding the director nominees, the other current members of our Board of Directors, and executive officers who are not also directors. Age information is as of March 24, 2025, and term as a director includes service with the Bank. With respect to directors and nominees, the biographies contain information regarding the person's business experience and the experiences, qualifications, attributes or skills that caused the Board of Directors to determine that the person should serve as a director. Each director of the Company is also a director of the Bank.

Nominees for Director for a Term Expiring in 2028:

Emily E. Ansani, age 48, has served as a director since 2024. Ms. Ansani previously served as a Vice President with Bank of America. During her 12 years at Bank of America she held various positions in Capital Markets Risk Management, the Futures Clearing Division, the Special Assets Division and the Global Corporate Bank. She graduated from the University of Dayton with a Bachelors of Science degree in Finance. Ms. Ansani currently serves on the Board of Directors of St. Joseph Catholic Academy since August 2024, and served on the Board of Directors of Science acatholic Schools of Racine from 2017 through 2023. While on such Board she was Board treasurer for two years. Ms. Ansani's financial experience and community involvement make her a valuable addition to the Board.

Thomas M. Ivantic, age 73, has served as a director since 1998 and is currently retired, after serving over 29 years as a commercial airline pilot for United Airlines. Mr. Ivantic is a 1973 graduate of St. Mary's University, Winona, Minnesota, with a BA in both Economics and Business Administration. Mr. Ivantic volunteers in many local groups, including Boy Scouts of America, PADS, Appalachia Service Project, St. Joseph Food Pantry and Bed Ministries. Mr. Ivantic's business experience in the airline industry and long-term service with United Airlines and with North Shore MHC, the predecessor of NSTS Bancorp, Inc., and his community involvement make him a valuable contributor to our Board.

The Board of Directors unanimously recommends a vote "FOR" each of the above nominees for director.

Directors Whose Term Expires in 2026:

Apolonio Arenas, age 54, has served as a director since 2006. Mr. Arenas also serves as the President of Dieck, Arenas and Associates PC. A certified public accountant since 1996, Mr. Arenas has held various accounting roles in his 30 years of service with Dieck, Arenas and Associates PC. Mr. Arenas attended Saint Xavier University and received a Bachelor's in Accountancy in 1992. Mr. Arenas serves on the board of directors of All Are Welcome Social Services, Inc. Mr. Arenas previously served on the school board of the Most Blessed Trinity Academy. Mr. Arenas' over 30 years of experience as a public accountant is an important skill set to have on the Board of Directors. In addition, his community involvement makes him a valuable contributor to the Board of Directors.

Thomas J. Kneesel, age 70, has served as a director since March 2020. Mr. Kneesel is the current President/Owner of Kneesel and Associates, a residential real estate appraisal firm. Mr. Kneesel holds a real estate license from the State of Wisconsin, and also works in real estate sales for Emmer Real Estate in Green Lake, Wisconsin on a part-time basis. Mr. Kneesel previously served as the Vice-President and Residential Appraisal Compliance Officer of Associated Bank, N.A., Green Bay, Wisconsin from 2011-2020. Mr. Kneesel is a past Chairman of the Wisconsin Real Estate Appraisal Advisory Board and a past member of the Wisconsin Real Estate Appraiser Board. Mr. Kneesel holds a degree in business from St. Mary's University, Winona, Minnesota in 1977. Mr. Kneesel's role as the President/Owner of a residential appraisal firm and his knowledge of the residential real estate market provide an important resource to the Board of Directors and management.

Rodney J. True, age 72, has served as director since March 2003. Mr. True is currently retired. Mr. True previously served as Chief Operating Officer of Spend Radar, a software development company located in Chicago, Illinois, for seven years from 2008 to 2015, and prior to that, as Chief Executive Officer of TrueSource, a spend analysis software company. Mr. True also held various management positions with Ernst & Young, Abbott Laboratories, and Republic Steel. Mr. True received a Master's Degree in Business Administration with the valedictorian distinction from the Lake Forest Graduate School of Management in 1983, and received a Bachelor's of Arts in Economics from Ripon College, Ripon, Wisconsin, in 1974. Mr. True's prior experience as the Chief Operating Officer and Chief Executive Officer of software development companies provides an important resource to the Board of Directors and management.

Directors Whose Term Expires in 2027:

Stephen G. Lear, age 69, has served as the Chairman of the Board of Directors, the Chief Executive Officer and the President of NSTS Bancorp, Inc. (including service as the Chairman of the Board of Directors of North Shore MHC, the predecessor to NSTS Bancorp, Inc.) since 2012, and Chairman of the Board of Directors of North Shore Trust and Savings since 2012 and as a director since 2003. Mr. Lear served as the Chief Executive Officer of North Shore Trust and Savings from 1997 to 2022. Mr. Lear has also served in varying capacities with North Shore Trust and Savings since 1979. Mr. Lear received a degree in Finance/Business Administration from the University of Illinois at Urbana-Champaign and his MBA from the Lake Forest Graduate School of Management in Lake Forest, Illinois. He previously served on the board of directors and as Chairman of the Illinois League of Financial Institutions. Mr. Lear has over 40 years of service in the financial services industry and provided 25 years of service as the Chief Executive Officer of North Shore Trust and Savings. Mr. Lear's experience makes him an important component of the Board of Directors and an effective Chairman of the Board.

Executive Officers Who are Not Directors

Nathan E. Walker, age 46, has served as the Chief Executive Officer of North Shore Trust and Savings and Executive Vice President of NSTS Bancorp, Inc. since July 2022 and the President of North Shore Trust and Savings since December 2020. Mr. Walker joined North Shore Trust and Savings in 1996 and has previously held roles as Chief Operating Officer and Senior Vice President of Retail Banking between 2010 and 2022. Mr. Walker holds a Bachelor's of Science degree in Finance from the University of Wisconsin-Parkside, a Master's degree in Business Administration from Cardinal Stritch University and an advanced degree from the Graduate School of Banking at the University of Wisconsin Madison. Mr. Walker serves on the board of directors of Siena Catholic Schools of Racine, Wisconsin.

Amy L. Avakian, age 63, has served as the Vice President and Chief Lending Officer of North Shore Trust and Savings from 2019 to present. Ms. Avakian began her career at North Shore Trust and Savings in 1983 and has served in various roles within the lending function and is a member of the loan committee. Ms. Avakian received her Bachelor's in Communication from St. Norbert College in De Pere, Wisconsin. Ms. Avakian is a member of the Lake County Property Investors Association.

Carissa H. Schoolcraft, age 33, has served as the Chief Financial Officer of North Shore Trust and Savings since April 2021. Ms. Schoolcraft previously served as the Controller of North Shore Trust and Savings from April 2020 to April 2021. Prior to joining North Shore Trust and Savings, Ms. Schoolcraft served as a Staff Auditor (Manager) at KPMG, LLP from 2013 to 2020. Ms. Schoolcraft serves on the audit committee of Cunningham Children's Home. Ms. Schoolcraft received a Bachelor's and Master's Degree in Accounting from Truman State University in Kirksville, Missouri.

Board Independence

The Board of Directors has determined that each of our directors, other than Stephen G. Lear, Thomas M. Ivantic, and Thomas J. Kneesel, is considered independent under the Nasdaq Stock Market corporate governance listing standards. Director Lear is not considered independent because he serves as the Chief Executive Officer of NSTS Bancorp, Inc. Director Ivantic is not considered independent because he is the brother of Amy L. Avakian, our Chief Lending Officer. Director Kneesel is not considered independent because he is the brother-in-law of Ms. Avakian. In determining the independence of our directors, the Board of Directors considered relationships between North Shore Trust and Savings and our directors that are not required to be reported under "Transactions With Certain Related Persons," below. The Board of Directors also considered current and prior relationships that each non-employee director may have with NSTS Bancorp, Inc. and North Shore Trust and Savings, including the lease of office space from North Shore Trust and Savings by Dieck, Arenas and Associates PC, for which Director Arenas serves as President, and all other facts and circumstances our Board of Directors deemed relevant in determining independence and found that, except as described above, none had a relationship that would preclude a finding of independence under applicable Nasdaq listing standards.

Board Vacancy; Compliance with Nasdaq Corporate Governance Listing Requirements

During the fourth quarter of 2024, and as we have previously disclosed, one of our directors, Mr. Thaddeus M. Bond, Jr., unexpectedly passed away. At the time of his death, Mr. Bond was a director of the Company and a member and chairman of both its Nominating and Corporate Governance Committee and Compensation Committee. As a result of Mr. Bond's passing, there is currently a vacancy on the Board of Directors in the class of directors whose term expires at the annual meeting in 2027. As a result, the Board of Directors currently consists of six members, only three of whom are "independent directors" under applicable Nasdaq listing standards.

On January 3, 2025, the Company notified Nasdaq of the passing of Mr. Bond. In the notice, the Company further notified Nasdaq that, accordingly, the Company does not meet the requirements of Rule 5605(b)(1) of the Nasdaq listing standards, which requires that a majority of the Board of Directors of the Company be comprised of "independent directors" as defined in Rule 5605(a)(2) of the Nasdaq listing standards.

On February 7, 2025, the Company received a letter from Nasdaq confirming that, due to Mr. Bond's death, the Company has temporarily fallen out of compliance with the requirements of Rule 5605(b)(1) of the Nasdaq listing standards. In accordance with Rule 5605(b)(1)(A) of the Nasdaq listing standards, the Company has until the earlier of its 2025 annual stockholders' meeting or December 21, 2025 to regain compliance, or if the Company's 2025 annual stockholders' meeting is held before June 19, 2025, then the Company must evidence compliance no later than June 19, 2025.

The Board of Directors currently anticipates appointing a new independent director to fill the vacancies on the Boards of both the Company and the Bank prior to end of the cure period described above, and will provide supplemental disclosure to this Proxy Statement, if necessary, to reflect such appointment at such time. In the event the Company does not identify and appoint a new independent director prior to June 19, 2025, we expect that Nasdaq will consider the Company to be non-compliant with its listing standards and will take steps to seek to delist the Company's common stock from the Nasdaq Capital Market.

Board Leadership Structure and Risk Oversight

In July 2022, the Board of Directors of the Bank separated the position of Chairman of the Board and Chief Executive Officer of the Bank. The Board of Directors of the Company currently combines the position of Chairman of the Board with the position of a Chief Executive Officer. The Board of Directors believes this provides an efficient and effective leadership model for the Company. The Board believes that combining the Chairman of the Board and Chief Executive Officer positions fosters clear accountability, effective decision-making, and alignment on corporate strategy. To assure effective independent oversight, the Board has adopted a number of governance practices, including independent directors on the Board of Directors and the Compensation Committee conducting performance evaluations of the Chairman of the Board and Chief Executive Officer.

The Board of Directors recognizes that, depending on the circumstances, other leadership models might be appropriate. Accordingly, the Board of Directors periodically reviews the Company's leadership structure.

The Board of Directors is actively involved in oversight of risks that could affect NSTS Bancorp, Inc. and the Bank. This oversight is conducted primarily through committees of the Board of Directors, but the full Board of Directors has retained responsibility for general oversight of risks. The Board of Directors also satisfies this responsibility through reports by the committee chair of all board committees regarding the committees' considerations and actions, through review of minutes of committee meetings and through regular reports directly from officers responsible for oversight of particular risks within the Company. The Board of Directors of North Shore Trust and Savings also has additional committees that conduct risk oversight. All committees are responsible for the establishment of policies that guide management and staff in the day-to-day operation of NSTS Bancorp, Inc. and North Shore Trust and Savings such as lending, enterprise risk management, asset/liability management, information technology, compliance, investment management and others.

Delinquent Section 16(a) Reports

Section 16(a) of the Securities Exchange Act of 1934, as amended, requires our directors and executive officers, and persons owning more than 10% of a registered class of our equity securities, to file with the Securities and Exchange Commission ("SEC") reports of ownership and changes in ownership of the Company's equity securities on Forms 3, 4 and 5 ("Section 16(a) Reports"). Based on a review of Section 16(a) Reports filed with the SEC and written representations, if any, from our directors and executive officers, we believe that, with respect to the 2024 fiscal year, all required Section 16(a) Reports were timely filed.

Code of Ethics for Senior Officers

NSTS Bancorp, Inc. has adopted a Code of Ethics for Senior Officers that applies to NSTS Bancorp, Inc.'s principal executive officer, principal financial officer, or persons performing similar functions as well as its other executive officers. A copy of the Code of Ethics for Senior Officers is available under the "Investor Relations" section of our website, www.northshoretrust.com. Amendments to and waivers from the Code of Ethics for Senior Officers will also be disclosed on our website.

It is expected that all directors, officers and employees act in accordance with the highest standards of personal and professional conduct in all aspects of their employment and association with the Company and the Bank, to comply with all applicable laws, rules and regulations and to adhere to all policies and procedures adopted by the Company and the Bank.

Insider Trading Policy

The Company has adopted the NSTS Bancorp, Inc. Insider Trading Policy (the "Insider Trading Policy") that governs the purchase, sale, and other acquisitions and/or dispositions of the Company's securities by directors, officers, and employees.

A copy of the Insider Trading Policy is filed as an exhibit to our Annual Report on Form 10-K for the fiscal year ended December 31, 2024, and is also available under the "Investor Relations" section of our website, www.northshoretrust.com.

Anti-Hedging Policy

Pursuant to the Insider Trading Policy, directors, officers and employees of the Company and the Bank, and their affiliated persons, are prohibited from entering into hedging or monetization transactions or similar arrangements (including prepaid variable forward contracts, equity swaps, collars, and exchange funds) that hedge or offset, or are designed to hedge or offset, any decrease in the market value of Company's securities they may hold.

Policy Concerning Recovery of Erroneously Awarded Compensation

As required under the rules of the SEC and Nasdaq, the Company has adopted a compensation clawback policy that provides that, in the event of a restatement of the Company's financial statements due to the material non-compliance of the Company with any applicable financial reporting requirement under the securities laws, our executive officers will be required to forfeit or reimburse the Company for certain incentive-based compensation paid to such employee. A copy of the Company's Policy Concerning Recovery of Erroneously Awarded Compensation has been filed as an exhibit to the Company's 2023 Annual Report on Form 10-K filed with the SEC.

Attendance at Annual Meetings of Stockholders

The Company does not have a written policy regarding director attendance at annual meetings of stockholders, although all directors are expected to attend our annual meetings of stockholders absent unavoidable scheduling conflicts. Six of the seven members of the Board of Directors in 2024 attended the 2024 Annual Meeting of Stockholders.

Communications with the Board of Directors

The Board of Directors and management encourage communication from our stockholders. Any stockholder who wishes to contact our Board of Directors or an individual director may do so by writing to: NSTS Bancorp, Inc., 700 S. Lewis Avenue, Waukegan, Illinois 60085, Attention: Board of Directors. Communications are reviewed by the Corporate Secretary and are then distributed to the Board of Directors or the individual director, as appropriate, depending on the facts and circumstances outlined in the communications received. The Corporate Secretary may attempt to handle an inquiry directly (for example, where it is a request for information at NSTS Bancorp, Inc. or it is a stock-related matter). The Corporate Secretary has the authority not to forward a communication if it is primarily commercial in nature, relates to an improper or irrelevant topic, or is unduly hostile, threatening, illegal or otherwise inappropriate. At each Board of Directors meeting, the Corporate Secretary will present a summary of all communications received since the last meeting that were not forwarded and make those communications available to the Directors on request.

Meetings and Committees of the Board of Directors

In 2024, the Board of Directors held 12 regular meetings, including the 2024 Annual Meeting of Stockholders, and one special meetings. No member of the Board of Directors or any committee thereof attended fewer than 75% of the aggregate of: (i) the total number of meetings of the Board of Directors (held during the period for which he has been a director); and (ii) the total number of meetings held by all committees on which he served (during the periods that he served).

The Board of Directors has established standing committees, including an Audit Committee, a Nominating and Corporate Governance Committee and a Compensation Committee. Each of these committees operates under a written charter, which governs its composition, responsibilities and operations. A copy of the charter of each committee is available on the "Investor Relations" page of the Company's website, www.northshoretrust.com. The table below sets forth the members of each of the listed standing committees.

| Nominating and Corporate | | | | | |
|--------------------------|-------------------------|-------------------------|--|--|--|
| Audit Committee | Governance Committee | Compensation Committee | | | |
| Apolonio Arenas (Chair) | Emily E. Ansani (Chair) | Emily E. Ansani (Chair) | | | |
| Emily E. Ansani | Apolonio Arenas | Apolonio Arenas | | | |
| Rodney J. True | Rodney J. True | | | | |

Audit Committee. The Audit Committee meets periodically with the independent registered public accounting firm and management to review accounting, auditing, internal control structure and financial reporting matters. The Audit Committee also receives and reviews the reports and findings and other information presented to them by the Company's officers regarding financial reporting policies and practices. The Audit Committee also reviews the performance of the Company's independent registered public accounting firm, the internal audit function and oversees policies associated with financial risk assessment and risk management. The Audit Committee selects the independent registered public accounting firm and meets with them to discuss the results of the annual audit and any related matters. The Board of Directors believes that Directors Arenas and Ansani qualify as an "audit committee financial expert" as such term is defined by the rules and regulations of the Securities and Exchange Commission.

The Audit Committee met four times during 2024.

Nominating and Corporate Governance Committee. The Nominating and Corporate Governance Committee is responsible for, among other things, assisting the Board of Directors in identifying qualified individuals to become Board members, in determining the size and composition of the Board and its committees, in monitoring a process to assess Board effectiveness and in developing and implementing the Company's corporate governance guidelines.

The Nominating and Corporate Governance Committee has identified the following criteria to be used for the selection of individuals to be considered for election or reelection to the Board and committees thereof: personal and professional integrity, community involvement and business strengths that are varied from the occupational talents already represented on the Board, and diversification from the current Board's ethnicity, race and gender diversification. The Board of Directors believes that its directors and nominees possess diverse skills, experiences and perspectives that enable the Board to execute its responsibilities.

The process for identifying and evaluating potential Board nominees includes soliciting recommendations from directors and officers of the Company based on those criteria. Additionally, the Board of Directors will consider persons recommended by stockholders of the Company in selecting the Board's nominee for election. Other than with respect to the provisions related to Mr. Lear's nomination as a director under his employment agreement, there is no difference in the manner in which persons recommended by stockholders in selecting Board nominees are evaluated.

Only persons who are nominated in accordance with the procedures set forth in our Bylaws will be eligible for election as directors. Nominations of persons for election to the Board of Directors of the Company may be made at a meeting of stockholders at which directors are to be elected only (i) by or at the direction of the Board of Directors or (ii) by any stockholder of the Company entitled to vote for the election of directors at the meeting who complies with the notice procedures set forth in the Bylaws. See "Stockholder Proposals and Nominations" for a discussion of how stockholders can seek to nominate persons for director.

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

Compensation Committee. The Compensation Committee assists the Board in fulfilling the Board's responsibilities relating to the compensation and benefits provided to the Company's executive management. The Compensation Committee also is authorized to review, evaluate and determine, and where warranted or appropriate, make recommendations to the Board for its determination, as to various benefit plans and the overall compensation for the Company and its wholly owned subsidiaries. In particular, the Compensation Committee establishes and approves the objectives relevant to the compensation paid to our Chief Executive Officer. The Chief Executive Officer may make recommendations to the Compensation Committee from time to time regarding the appropriate mix and level of compensation for the Company and the Bank, however, he does not provide recommendations with respect to, and is not present during any committee deliberations or voting on, his compensation. The Compensation Committee also assists the Board of Directors in succession planning and management development for executive officers. The Compensation Committee also assists the appropriate levels and form of director compensation and makes recommendations to the Board of Directors regarding director compensation.

The Compensation Committee met twice during 2024.

Transactions with Certain Related Persons

Federal law generally prohibits publicly traded companies from making loans to their executive officers and directors, but it contains a specific exemption from the prohibition for loans made by federally insured financial institutions, such as North Shore Trust and Savings, to their executive officers and directors in compliance with federal banking regulations. At December 31, 2024, all of the loans made by the Bank to directors and executive officers of the Company were made in the ordinary course of business, 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 North Shore Trust and Savings, and did not involve more than the normal risk of collectability or present other unfavorable features. These loans were performing according to their original repayment terms at December 31, 2024 and were made in compliance with federal banking regulations.

Other than the loans described above, North Shore Trust and Savings has not entered into any transactions since January 1, 2020, and NSTS Bancorp, Inc. has not entered into any transactions since its incorporation in September 2021, in which the amount involved exceeded \$120,000 and in which any related persons had or will have a direct or indirect material interest.

Security Ownership of Certain Beneficial Owners and Management

The following table sets forth the beneficial ownership of our Common Stock as of March 24, 2025 by the following individuals or entities:

- each person known to us that owns more than 5% of the outstanding shares of Common Stock;
- each of our directors and named executive officers; and
- all directors and executive officers of the Company as a group.

Beneficial ownership is determined in accordance with the rules of the SEC. Except as otherwise indicated, each person named in the table has sole voting and investment power with respect to all shares of Common Stock shown as beneficially owned, subject to any applicable community property laws. As of March 24, 2025, 5,247,826 shares of Common Stock were outstanding.

The address for each of our directors and executive officers is c/o NSTS Bancorp, Inc., 700 S. Lewis Avenue, Waukegan, Illinois 60085.

| | Shares of Common Stock Beneficially Owned as of the Record Date ⁽¹⁾ | Percent of Shares of Common Stock Outstanding ⁽²⁾ |
|---|--|--|
| Persons Owning Greater than 5% | | <u>u</u> |
| North Shore Trust and Savings ESOP Trust | | |
| 700 S. Lewis Ave. | | |
| Waukegan, IL 60085 | 430,239 | 8.2% |
| Directors | | |
| Stephen G. Lear | 62,139(3) | 1.2 |
| Apolonio Arenas | 31,440(4) | * |
| Emily E. Ansani | (5) | * |
| Thomas M. Ivantic | 26,440(6) | * |
| Thomas J. Kneesel | 26,440(7) | * |
| Rodney J. True | 46,440(8) | * |
| Non-Director Named Executive Officers | | |
| Nathan E. Walker | 62,023(9) | 1.2 |
| Amy L. Avakian | 44,765(10) | * |
| Carissa H. Schoolcraft | 23,417(11) | * |
| All Directors and Executive Officers as a group (9 persons) | 323,104 | 6.2% |

* Less than one percent

(2) Based on a total of 5,247,826 shares of common stock outstanding as of March 24, 2025.

(3) Includes 6,939 shares allocated to Mr. Lear as a participant in the ESOP which are fully vested. There are 28,800 shares of unvested restricted stock over which Mr. Lear has sole voting power but no investment power which are not included in the above table. There are unvested options to purchase 72,000 shares which are not included in the above table.

⁽¹⁾ In accordance with Rule 13d-3 under the Securities Exchange Act of 1934, as amended, a person is deemed to be the beneficial owner, for purposes of this table, of any shares of NSTS Bancorp, Inc. common stock if he or she has or shares voting or investment power with respect to such common stock or has a right to acquire beneficial ownership at any time within 60 days from March 24, 2025. At March 24, 2025, there were 106,900 outstanding options to purchase shares of NSTS Bancorp, Inc. common stock, all of which could be exercised within 60 days. As used herein, "voting power" is the power to vote or direct the voting of shares and "investment power" is the power to dispose or direct the disposition of shares. Except as otherwise noted, ownership is direct and the named individuals or group exercise sole voting and investment power over the shares.

- (4) Includes 7,500 shares held by Mr. Arenas' spouse. There are 7,360 shares of unvested restricted stock over which Mr. Arenas has sole voting power but no investment power which are not included in the above table. There are unvested options to purchase 18,400 shares which are not included in the above table.
- (5) There are 9,200 shares of unvested restricted stock over which Ms. Ansani has sole voting power but no investment power which are not included in the above table. There are unvested options to purchase 23,000 shares which are not included in the above table.
- (6) There are 7,360 shares of unvested restricted stock over which Mr. Ivantic has sole voting power but no investment power which are not included in the above table. There are unvested options to purchase 18,400 shares which are not included in the above table.
- (7) There are 7,360 shares of unvested restricted stock over which Mr. Kneesel has sole voting power but no investment power which are not included in the above table. There are unvested options to purchase 18,400 shares which are not included in the above table.
- (8) Includes 10,000 shares held by Mr. True's spouse. There are 7.360 shares of unvested restricted stock over which Mr. True has sole voting power but no investment power which are not included in the above table. There are unvested options to purchase 18,400 shares which are not included in the above table.
- (9) Includes 2,500 shares held for the benefit of Mr. Walker's children and 5,723 shares allocated to Mr. Walker as a participant in the ESOP which are fully vested. There are 27,200 shares of unvested restricted stock over which Mr. Walker has sole voting power but no investment power which are not included in the above table. There are unvested options to purchase 68,000 shares which are not included in the above table.
- (10) Includes 4,265 shares allocated to Ms. Avakian as a participant in the ESOP which are fully vested. There are 12,000 shares of unvested restricted stock over which Ms. Avakian has sole voting power but no investment power which are not included in the above table. There are unvested options to purchase 30,000 shares which are not included in the above table.
- (11) Includes 4,217 shares allocated to Ms. Schoolcraft as a participant in the ESOP which are fully vested. There are 16,800 shares of unvested restricted stock over which Ms. Schoolcraft has sole voting power but no investment power which are not included in the above table. There are unvested options to purchase 40,000 shares which are not included in the above table.

Executive and Director Compensation

Executive Compensation

The following tables set forth certain information as to the compensation paid to or earned by the named executive officers for the fiscal years ended December 31, 2024, 2023 and 2022.

| | Summary Compensation Table | | | | | | | | |
|---|----------------------------|--------------------|------------------|--|-----------------------------|--------------------------------------|--------------------|--|--|
| Name and principal position | Year | Salary (\$) | Bonus(3) (\$) | Restricted Stock Awards ⁽⁴⁾ (\$) | Option Awards(4) (\$) | All Other Compensation(5) (\$) | Total (\$) | | |
| Stephen G. Lear Chairman, President and Chief | 2024 | 214,451 | 24,595 | _ | — | 84,623 | 323,668 | | |
| Executive Officer of the Company, Chairman of | 2023 | 214,451 | 32,000 | 336,960 | 320,310 | 83,883 | 987,604 | | |
| the Bank(1) | 2022 | 212,498 | 40,000 | — | — | 61,838 | 314,336 | | |
| Nathan E. Walker Chief Executive Officer of the Bank and Executive Vice | 2024 | 198,509 | 24,595 | — | — | 34,378 | 257,482 | | |
| President of the Company(2) | 2023 2022 | 191,760 178,269 | 27,500 23,000 | 318,240 | 302,515 | 31,815 12,076 | 871,829 213,346 | | |
| | | | | | | | | | |
| Carissa H. Schoolcraft Chief Financial Officer of the | 2024 | 166,654 | 16,500 | — | — | 25,725 | 208,881 | | |
| Bank and the Company | 2023 2022 | 160,846 116,154 | 13,000 18,500 | 196,560 | 177,950 | 22,911 8,079 | 571,267 142,733 | | |
| Amy L. Avakian Chief Lending Officer and Vice | 2024 | 150,288 | 15,000 | — | — | 25,443 | 190,732 | | |
| President of the Bank | 2023 2022 | 145,116 138,654 | 14,000 14,000 | 140,400 | 133,463 | 23,851 9,159 | 456,829 161,813 | | |

(1) Transitioned the position of Chief Executive Officer of North Shore Trust and Savings to Mr. Walker in July 2022. Amounts for 2022 include Mr. Lear's compensation as Chief Executive Officer of North Shore Trust and Savings from January 1, 2022 to July 26, 2022. Mr. Lear's compensation as Chairman of North Shore Trust and Savings is included for the fiscal years ended December 31, 2024, 2023 and 2022. Mr. Lear served as the Chairman, President and Chief Executive Officer of NSTS Bancorp, Inc. for the fiscal years ended December 31, 2024, 2023 and 2022.

- (2) Appointed Chief Executive Officer of North Shore Trust and Savings in July 2022. Amounts for 2022 include Mr. Walker's compensation as Chief Executive Officer of North Shore Trust and Savings from July 26, 2022 to December 31, 2022, and Mr. Walker's compensation as Chief Operating Officer of North Shore Trust and Savings from January 1, 2022 to July 26, 2022.
- (3) Amounts in this column represent the payment of a discretionary bonus earned in recognition for performance in the prior year.
- (4) In accordance with FASB ASC Topic 718, the reported amount represents the full grant date fair value of each award. Since the 2023 awards vest at a rate of 20% per year beginning in 2024, none of the named executive officers recognized any income from the awards during 2023 but will recognize income in future years as the restricted stock awards vest or options are exercised. The assumptions used in the calculation of these amounts are included in Note 12 to our audited financial statements. For stock option awards, amounts reported are grant date fair values computed based upon the Black-Scholes option valuation model, and the actual value, if any, that may be realized will depend on the excess of the stock price over the exercise price on the date the option is exercised. Therefore, there is no assurance that the value of an option realized by a named executive officer will be at or near the value shown above. For restricted stock awards, the amount shown reflects the aggregate grant date fair value of restricted stock awards granted to each named executive officer in 2023.
- (5) The amounts in this column reflect what North Shore Trust and Savings paid for, or reimbursed, the applicable named executive officer for various benefits and perquisites received. Perquisites received consist of club dues. This column does not reflect perquisites and personal benefits received by our named executive officers, the aggregate value of which is less than \$10,000. A break-down of the various elements of compensation in this column for calendar year 2023 is set forth in the following table:

All Other Compensation

| Name | 401(k) Match (\$) | Board Fees (\$) | Employee Stock Ownership Plan (\$) | Perquisites Received (\$) | Total All Other Compensation |
|------------------------|----------------------|--------------------|--|---------------------------------|---------------------------------|
| Stephen G. Lear | 14,343 | 32,000 | 26,208 | 12,072 | 84,623 |
| Nathan E. Walker | 13,386 | — | 20,992 | | 34,378 |
| Carissa H. Schoolcraft | 8,275 | _ | 17,452 | | 25,728 |
| Amy L. Avakian | 9,218 | — | 16,225 | — | 25,443 |

Benefit Plans and Agreements

Employment Agreements. At the closing of the mutual-to-stock conversion offering, in January 2022, NSTS Bancorp, Inc. and North Shore Trust and Savings entered into an employment agreement with Mr. Lear. The employment agreement was amended and restated in March 2024. The employment agreement has an initial term of three years, which extends automatically for one additional year on each anniversary of the effective date of the agreement, so that the remaining term is again three years, unless one party gives the other party written notice of nonrenewal at least 90 days prior to the applicable anniversary date. The employment agreement provides that Mr. Lear's base salary may be increased, but not decreased, at the discretion of the Board of Directors. In addition to the base salary, the agreement provides that Mr. Lear's base salary more annual bonus as may be determined by the Board of Directors. Mr. Lear is also eligible to participate in all employee benefit plans arrangements and perquisites offered to our employees and officers, and the reimbursement of reasonable business expenses incurred in the performance of his duties. We also provide Mr. Lear with reimbursement for monthly membership dues at a country club or similar club, and may provide other perquisites such as an automobile allowance and/or cell phone expense reimbursement as determined by the Board of Directors.

The employment agreement is terminable with or without cause by us. Mr. Lear has no right to compensation or other benefits pursuant to the employment agreement for any period after termination for cause, as defined in the agreement. In the event we terminate Mr. Lear's employment without cause or Mr. Lear voluntarily resigns for "good reason" (i.e., a "qualifying termination event"), we will pay Mr. Lear a severance payment equal to the base salary that Mr. Lear would have received had he continued employment for the remainder of the then-current term. The severance payment will be paid as salary continuation in substantially equal installments in accordance with our regular payroll practice over the remainder of the then-current term. Mr. Lear must sign a general release of claims to receive the severance payment agreement includes a material reduction in base salary, a material adverse change in responsibilities, titles, powers or duties, a failure to appoint Mr. Lear as a director of North Shore Trust and Savings or a failure to nominate Mr. Lear to stand for election to NSTS Bancorp, Inc.'s Board of Directors, relocation of Mr. Lear's principal place of employment to a location more than 25 miles from his current principal place of employment, or material breach of the employment agreement by us.

If a qualifying termination event occurs within 24 months following a change in control of NSTS Bancorp, Inc. or North Shore Trust and Savings, Mr. Lear would be entitled to (in lieu of the payments and benefits described in the previous paragraph) a severance payment equal to two and one-half times the sum of (i) Mr. Lear's base salary, plus (ii) the average annual bonus earned by Mr. Lear for the three (3) years immediately preceding the year in which the change in control occurs. This change in control severance will be paid in a lump sum payment. Mr. Lear must sign a general release of claims to receive the change in control severance payment. Also, upon termination of employment, Mr. Lear will be required to a one-year non-solicitation restriction set forth in his employment agreement. In addition, the employment agreement provides that upon termination of Mr. Lear's employment for any reason, other than cause, we will provide for the continuation of the welfare benefits of medical, dental or other health coverage, at the same premium cost to Mr. Lear and at the same coverage level as in effect as of the effective date of termination until the 18th month anniversary of the effective date of termination.

The employment agreement terminates upon Mr. Lear's death, and in such event, his estate or beneficiary will be paid his accrued benefits through such date.

In March 2024, NSTS Bancorp, Inc. and North Shore Trust and Savings entered into an employment agreement with Mr. Walker. The employment agreement has an initial term of three years, which extends automatically for one additional year on each anniversary of the effective date of the agreement, so that the remaining term is again three years, unless one party gives the other party written notice of nonrenewal at least 90 days prior to the applicable anniversary date. The employment agreement provides that Mr. Walker's base salary may be increased, but not decreased, at the discretion of the Board of Directors. In addition to the base salary, the agreement provides that Mr. Walker will be eligible to receive an annual bonus as may be determined by the Board of Directors. Mr. Walker is also entitled to participate in any other short-term incentive compensation plan or long-term or equity incentive plans that may be adopted by the Board of Directors. Mr. Walker is also entitled to participate in all employee benefit plans arrangements and perquisites offered to our employees and officers, and the reimbursement of reasonable business expenses incurred in the performance of his duties. We may also provide Mr. Walker with reimbursement for monthly membership dues at a country club or similar club, and other perquisites such as an automobile allowance and/or cell phone expense reimbursement as determined by the Board of Directors.

The employment agreement is terminable with or without cause by us. Mr. Walker has no right to compensation or other benefits pursuant to the employment agreement for any period after termination for cause, as defined in the agreement. In the event we terminate Mr. Walker's employment without cause or Mr. Walker voluntarily resigns for "good reason" (i.e., a "qualifying termination event"), we will pay Mr. Walker a severance payment equal to the base salary that Mr. Walker would have received had he continued employment for the remainder of the then-current term. The severance payment will be paid as salary continuation in substantially equal installments in accordance with our regular payroll practice over the remainder of the then-current term. Mr. Walker must sign a general release of claims to receive the severance payment. A "good reason" condition for purposes of the employment agreement includes a material reduction in base salary, a material adverse change in responsibilities, titles, powers or duties, relocation of Mr. Walker's principal place of employment to a location more than 25 miles from his current principal place of employment, or material breach of the continuation of the welfare benefits of medical, dental or other health coverage, at the same premium cost to Mr. Walker and at the same coverage level as in effect as of the effective date of termination until the eighteen month anniversary of the effective date of termination.

If a qualifying termination event occurs within 24 months following a change in control of NSTS Bancorp, Inc. or North Shore Trust and Savings, Mr. Walker would be entitled to (in lieu of the payments and benefits described in the previous paragraph) a severance payment equal to two and one-half times the sum of (i) Mr. Walker's base salary, plus (ii) the average annual bonus earned by Mr. Walker for the three (3) years immediately preceding the year in which the change in control occurs. This change in control severance will be paid in a lump sum payment. Mr. Walker must sign a general release of claims to receive the change in control severance payment. Also, upon termination of employment, Mr. Walker will be required to adhere to a one-year non-solicitation restriction set forth in his employment agreement.

The employment agreement terminates upon Mr. Walker's death, and in such event, his estate or beneficiary will be paid his accrued benefits through such date.

Change in Control Agreements. At the closing of the mutual-to-stock conversion offering, in January 2022, North Shore Trust and Savings entered into a change in control agreement with each of Mr. Walker, Ms. Avakian and Ms. Schoolcraft. The change in control agreements had an initial term of three years, which term extends automatically for one additional year on each anniversary of the effective date of the agreement. If North Shore Trust and Savings terminates the executive's employment, the change in control agreement will terminate upon such termination of employment. Notwithstanding the foregoing, in the event a change in control event occurs during the term of a change in control agreement, the term of the agreement will automatically extend for the greater of 12 months from the change of control event or until all benefits then due and owing are paid to the executive. Mr. Walker's Change in Control Agreement is superseded by his new employment agreement entered into in March 2024 and described above; accordingly Mr. Walker's change in control agreement is of no further force or effect.

Upon termination of the executive's employment by North Shore Trust and Savings without "cause" or by the executive with "good reason" on or after the effective date of a change in control of North Shore Trust and Savings or NSTS Bancorp, Inc., Ms. Avakian and Ms. Schoolcraft each would be entitled to a severance payment equal to 1.5 times the sum of (i) her base salary; and (ii) her average annual bonus earned for the three (3) years immediately preceding the year in which the change in control occurs. This change in control severance will be paid in substantially equal installments over a 12-month period. In addition, the executive would receive continuation of medical, dental or other health coverage, at the same premium cost to executive, for 12 months following termination of employment. The executive must sign a general release of claims to receive the change in control severance payment.

A "good reason" condition for purposes of the change in control agreements includes a material reduction in base salary, a material adverse change in the responsibilities, powers or duties of executive, or a relocation of the executive's principal place of employment to a location more than 25 miles from her current principal place of employment.

401(k) Plan

North Shore Trust and Savings sponsors the North Shore Trust and Savings 401(k) Plan ("401(k) Plan"), which is a qualified, tax-exempt defined contribution plan with a salary deferral feature under Section 401(k) of the Internal Revenue Code. An employee of North Shore Trust and Savings is eligible to become a participant in, and entitled to enter into, the plan after reaching age 18 and completing three months of employment.

Under the 401(k) Plan, during 2024 participants were permitted to make salary deferral contributions (in whole percentages or specific dollar amounts) in any amount up to 100% of their plan salary up to the maximum percentage of compensation allowed by law (\$23,000 for 2024). Participants who are age 50 or older are permitted to make "catch up" contributions to the plan up to \$7,500 (for 2024, as indexed annually). North Shore Trust and Savings currently contributes a matching contribution amount equal to 100% of the participant's elective deferral up to 6%. North Shore Trust and Savings may also make a discretionary, fully vested profit sharing contribution to the 401(k) Plan. Upon termination of employment, including following retirement or disability, a participant may withdraw his or her vested account balance.

Noncontributory Profit-Sharing Plan

North Shore Trust and Savings sponsors a noncontributory profit-sharing plan covering all employees who have worked more than 1,000 hours during the plan year and remain employed as of the year-end. Funds are fully vested after two years of employment. There was no profit sharing expense for each of the years ended 2024, 2023 or 2022.

Employee Stock Ownership Plan

North Shore Trust and Savings established the ESOP for its employees which became effective upon completion of the mutual-to-stock conversion. Employees who have been credited with at least 1,000 hours of service during a 12-month period and who have attained age 18 are eligible to participate in the employee stock ownership plan.

As part of the mutual-to-stock conversion, in order to fund the purchase of up to 8.0% of the Common Stock issued in the mutual-to-stock conversion offering (including shares contributed to the charitable foundation), or 431,836 shares, the ESOP borrowed funds from NSTS Bancorp, Inc. The loan to the ESOP has a term of 25 years, to be repaid principally from North Shore Trust and Savings contributions to the ESOP, and the collateral for the loan is the Common Stock purchased by the ESOP. The interest rate for the ESOP loan is 3.25%. NSTS Bancorp, Inc. may, in any plan year, make additional discretionary contributions for the benefit of plan participants in either cash or shares of Common Stock, which may be acquired through the purchase of outstanding shares in the market or from individual stockholders, upon the original issuance of additional shares by NSTS Bancorp, Inc. or upon the sale of treasury shares by NSTS Bancorp, Inc. Such purchases, if made, would be funded through additional borrowings by the ESOP or additional contributions from North Shore Trust and Savings. The timing, amount and manner of future contributions to the ESOP will be affected by various factors, including prevailing regulatory policies, the requirements of applicable laws and regulations and market conditions.

Shares purchased by the ESOP with the loan proceeds are held in a suspense account and released for allocation to participants on a pro rata basis as debt service payments are made. Shares released from the ESOP will be allocated to each eligible participant's ESOP account based on the ratio of each such participant's compensation, consisting of salary and bonus, to the total of such compensation of all eligible ESOP participants. Forfeitures may be used for several purposes such as the payment of expenses or be reallocated among remaining participating employees. Account balances of participants in the ESOP plan will be 100% vested after five years of service. Credit is given for years of service with North Shore Trust and Savings prior to adoption of the ESOP. In the case of a "change in control," as defined in the ESOP, however, participants will become immediately fully vested in their account balances. Participants will also become fully vested in their account balances upon death, disability or retirement. Benefits may be payable upon retirement or separation from service.

U.S. generally accepted accounting principles ("GAAP") require that any third-party borrowing by the ESOP be reflected as a liability on our statement of financial condition. Since the ESOP is borrowing from NSTS Bancorp, Inc., the loan will not be treated as a liability but instead will be excluded from stockholders' equity.

Our ESOP will be subject to the requirements of the Employee Retirement Income Security Act of 1974, as amended, and the applicable regulations of the IRS and the Department of Labor.

2023 Equity Incentive Plan

At our Annual Meeting held on May 24, 2023, the Company's stockholders approved the NSTS Bancorp, Inc. 2023 Equity Incentive Plan (the "2023 Equity Incentive Plan"), which provides for the grant of stock-based awards to our directors and executive officers. The 2023 Equity Incentive Plan authorized the issuance or delivery to participants of up to 755,714 shares of NSTS Bancorp, Inc. common stock pursuant to grants of incentive and non-qualified stock options and restricted stock awards. Of this number, the maximum number of shares of NSTS Bancorp, Inc. common stock that may be issued under the 2023 Equity Incentive Plan pursuant to the exercise of stock options is 539,796, and the maximum number of shares of NSTS Bancorp, Inc. common stock that may be issued as restricted stock awards is 215,918.

Policy Regarding the Timing of Option Awards

The Company provides the following disclosure regarding the timing of stock option awards in relation to the disclosure of material nonpublic information, as required by Item 402(x) of Regulation S-K. While the Company does not have a formal written policy in place with regard to the timing of awards of stock options in relation to the disclosure by the Company of material nonpublic information, the Compensation Committee does not seek to time equity grants to take advantage of information, either positive or negative, about the Company that has not been publicly disclosed. The Company did not grant any stock options to executive officers of the Company, including NEOs, during 2024. The Company has not timed the disclosure of material nonpublic information to affect the value of executive compensation.

Outstanding Equity Awards at Fiscal Year End

The following table sets forth information with respect to outstanding equity awards under the 2023 Equity Incentive Plan as of December 31, 2024, for the named executive officers.

| | | Option awards | | Stock awards | | | |
|------------------------|--|--|--------------------|----------------------|---|---|--|
| News | Number of securities underlying unexercised options exercisable | Number of securities underlying unexercised options unexercisable | Option exercise | Option expiration | Number of Shares or Units of Stock That Have Not Victual (#) | Market Value of Shares or Units of Stock That Have Not Vected (2) (1) | |
| Name | (#) | (#) | price (\$) | date | Vested (#) | Vested (\$) (1) | |
| Stephen G. Lear | 18,000 | 72,000 | 9.36 | 6/15/2033 | 28,800 | 339,840 | |
| Nathan E. Walker | 17,000 | 68,000 | 9.36 | 6/15/2033 | 27,200 | 320,960 | |
| Amy L. Avakian | 7,500 | 30,000 | 9.36 | 6/15/2033 | 12,000 | 141,600 | |
| Carissa H. Schoolcraft | 10,000 | 40,000 | 9.36 | 6/15/2033 | 16,800 | 198,240 | |

(1) Based on a closing price of NSTS Bancorp, Inc. common stock of \$11.80 as of December 31, 2024 (the last trading day of 2024).

Director Compensation

During 2024, each director of the Bank received an annual retainer of \$18,000 and a per meeting fee of \$1,000. Additionally, each director of the Company receives an additional retainer of \$2,000 (paid in quarterly installments) for his or her service on the Board of Directors of the Company.

The following table sets forth total compensation paid to directors for their service on the boards of directors of the Bank and the Company during the year ended December 31, 2024, other than to directors who are also named executive officers. Information with respect to director compensation paid to directors who are also named executive officers is included above in "-Executive Compensation –Summary Compensation Table."

| Name | Fees Earned or Paid in Cash (\$)(1) | Stock Award (\$)(2) | Option Award (\$)(2) | All Other Compensation(3) | Total (\$) |
|--------------------------|---|------------------------|-------------------------|------------------------------|------------|
| Apolonio Arenas | 31,000 | _ | _ | | 31,000 |
| Emily E. Ansani (4) | 24,000 | 103,960 | 100,422 | _ | 228,382 |
| Thaddeus M. Bond Jr. (5) | 32,000 | — | — | — | 32,000 |
| Thomas M. Ivantic | 32,000 | _ | _ | _ | 32,000 |
| Thomas J. Kneesel | 32,000 | _ | _ | | 32,000 |
| Rodney J. True | 32,000 | — | — | — | 32,000 |

(1) Messrs. Bond, Ivantic and True deferred all or a portion of their cash fees into the Director Deferred Compensation Plan described below.

(2) In accordance with FASB ASC Topic 718, the reported amount represents the full grant date fair value of each award. Since the 2024 awards vest at a rate of 20% per year beginning in 2025, Director Ansani did not recognize any income from the awards during 2024 but will recognize income in future years as the stock awards vest or options are exercised. The assumptions used in the calculation of these amounts are included in Note 11 to the Company's 2024 audited financial statements. For stock option awards, amounts reported are grant date fair values computed based upon the Black-Scholes option valuation model, and the actual value, if any, that may be realized will depend on the excess of the stock price over the exercise price on the date the option is exercised. Therefore, there is no assurance that the value of an option realized by a director will be at or near the value shown above. For restricted stock awards, the amount shown reflects the aggregate grant date fair value of restricted stock awards granted to each director in 2024.

(3) The amounts in this column reflect the various benefits and perquisites received. This column does not reflect perquisites and personal benefits received by our directors, the aggregate value of which is less than \$10,000.

(4) Ms. Ansani was elected as a director on April 18, 2024.

(5) Mr. Bond served as a Director until December 21, 2024. Due to his passing, all stock awards and options became fully vested in 2024. As of March 24, 2025, no stock options have been exercised.

Director Deferred Compensation Plan

We maintain a non-qualified unsecured director deferred compensation plan that allows directors of each of NSTS Bancorp, Inc. and North Shore Trust and Savings to elect to defer up to 100% of the retainer and monthly board fees. We establish a deferred compensation account for each participating director and credit the account with the fees deferred by the director plus interest equal to the prime rate plus two percent. Interest is credited to each such account quarterly.

PROPOSAL II – RATIFICATION OF APPOINTMENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Audit Committee of NSTS Bancorp, Inc. has approved the engagement of Plante & Moran, PLLC to be the Company's independent registered public accounting firm for the year ending December 31, 2025. At the Annual Meeting, stockholders will consider and vote on the ratification of the Audit Committee's engagement of Plante & Moran, PLLC for the year ending December 31, 2025. A representative of Plante & Moran, PLLC is expected to attend the Annual Meeting and may respond to appropriate questions and make a statement if he or she so desires.

The Audit Committee is responsible for the appointment and oversight of the Company's independent registered public accounting firm. Even if the engagement of Plante & Moran, PLLC is ratified, the Audit Committee, in its discretion, may direct the appointment of a different independent registered public accounting firm at any time during the year if it determines that such change would be in the best interests of the Company and its stockholders.

The Board of Directors recommends a vote "FOR" the ratification of Plante & Moran, PLLC as the Company's independent registered public accounting firm for the year ending December 31, 2025.

Matters Relating to Fees Paid to Independent Registered Accounting Firm

Set forth below is certain information concerning aggregate fees billed for professional services rendered by Plante & Moran, PLLC during the years ended December 31, 2024 and 2023, as well as all out-of-pocket costs incurred in connection with these services that were billed to the Company or its subsidiaries:

| | ar ended ber 31, 2024 | | ar ended ber 31, 2023 |
|--------------------|--------------------------|----|--------------------------|
| Audit Fees | \$ 146,535 | | 162,480 |
| Audit-Related Fees | | | _ |
| Tax Fees | 32,788 | | 16,275 |
| All Other Fees | | | |
| Total | \$ 179,323 | \$ | 178,755 |

Audit Fees. Audit fees include aggregate fees billed for professional services for the audit of NSTS Bancorp, Inc.'s annual consolidated financial statements for the fiscal years ended December 31, 2024 and December 31, 2023, respectively, including out-of-pocket expenses.

Audit-Related Fees. There were no audit-related fees billed by Plante & Moran, PLLC during the years ended December 31, 2024 and 2023.

Tax Fees. Tax Fees include fees billed for tax compliance and tax-related fees in 2024 and 2023.

Pre-Approval of Audit and Permissible Non-Audit Services of Independent Public Accounting Firm

The Audit Committee has considered whether the provision of non-audit services, which relate primarily to tax services and public company status, is compatible with maintaining the independence of Plante & Moran, PLLC. The Audit Committee concluded that performing such services does not affect the independence of Plante & Moran, PLLC in performing its function as the Company's independent registered public accounting firm.

The Audit Committee's current policy is to pre-approve all audit and non-audit services provided by the independent registered public accounting firm, either by approving an engagement prior to the engagement or pursuant to a pre-approval policy with respect to particular services, subject to the *de minimis* exceptions for non-audit services described in Section 10A(i)(1)(B) of the Securities Exchange Act of 1934, as amended. These services may include audit services, audit-related services, tax services and other services. The Audit Committee may delegate pre-approval authority to one or more members of the Audit Committee when expedition of services is necessary. The independent registered public accounting firm and management are required to periodically report to the full Audit Committee regarding the extent of services provided by the independent registered public accounting firm in accordance with this pre-approval, and the fees for the services performed to date. The Audit Committee pre-approved 100% of audit-related fees and tax fees paid during the years ended December 31, 2024 and 2023, as indicated in the table above.

Audit Committee Report

Our independent registered public accounting firm is responsible for performing an independent audit of our financial statements and issuing an opinion on the conformity of those financial statements with generally accepted accounting principles in the United States of America ("GAAP"). The Audit Committee oversees the Company's internal controls and financial reporting process on behalf of the Board of Directors.

In this context, the Audit Committee has met and held discussions with management and the independent registered public accounting firm. Management represented to the Audit Committee that the financial statements of the Company were prepared in accordance with GAAP and the Audit Committee has reviewed and discussed the financial statements with management and the independent registered public accounting firm. The Audit Committee discussed with the independent registered public accounting firm all matters required to be discussed by the applicable requirements of the Public Company Accounting Oversight Board and the Securities and Exchange Commission.

In addition, the Audit Committee has received the written disclosures and the letter from the independent registered public accounting firm required by the applicable requirements of the Public Company Accounting Oversight Board regarding the firm's independence from the Company and its management, and discussed with the registered public accounting firm their independence from the Company. In concluding that the registered public accounting firm is independent, the Audit Committee considered, among other factors, whether any non-audit services provided by the firm were compatible with its independence.

The Audit Committee discussed with the independent registered public accounting firm the overall scope and plans for its audit. The Audit Committee meets with the independent registered public accounting firm, with and without management present, to discuss the results of their examination, their evaluation of the Company's internal controls, and the overall quality of its financial reporting.

In performing these functions, the Audit Committee acts only in an oversight capacity. In its oversight role, the Audit Committee relies on the work and assurances of Company management, which has the primary responsibility for financial statements and reports, and of the independent registered public accounting firm which, in its report, expressed an opinion on the conformity to GAAP of NSTS Bancorp, Inc.'s consolidated financial statements. The Audit Committee's oversight does not provide it with an independent basis to determine that management has maintained appropriate accounting and financial reporting principles or policies, or appropriate internal controls and procedures designed to assure compliance with accounting standards and applicable laws and regulations. Furthermore, the Audit Committee's considerations and discussions with management and the independent registered public accounting firm do not assure that the financial statements are presented in accordance with GAAP, that the audit of the financial statements has been carried out in accordance with GAAP or that the independent registered public accounting firm is "independent."

In reliance on the reviews and discussions referred to above, the Audit Committee has recommended to the Board of Directors, and the Board of Directors has approved, that the audited financial statements be included in the Company's 2024 Annual Report for filing with the Securities and Exchange Commission.

This report has been provided by the Audit Committee:

Apolonio Arenas (Chair) Emily E. Ansani Rodney J. True

This report shall not be deemed incorporated by reference by any general statement incorporating by reference this proxy statement into any filing under the Securities Act of 1933, as amended, or the Securities Exchange Act of 1934, as amended, except to the extent that the Company specifically incorporates this information by reference, and shall not otherwise be deemed "soliciting material" or to be "filed" with the Securities and Exchange Commission under such acts.

PROPOSAL III – CONSIDERATION OF NON-BINDING STOCKHOLDER PROPOSAL RECOMMENDING THE SALE OR MERGER OF THE COMPANY

The Company received the proposal below from a stockholder and has been advised that such stockholder intends to have his representative present the following non-binding proposal at the Annual Meeting. The proposing stockholder, Robert T. Williamson, represented to the Company that he owns at least \$25,000 in market value of the Company's common stock for at least one year, and that he intends to continue to hold such shares through the date of the Annual Meeting. Mr. Williamson's address is 2809 Baypointe Circle, Tampa, FL 33611. The stockholder's proposal contains assertions about the Company and other matters that the Company believes are incorrect, but the Company has not attempted to refute those assertions. All statements contained in the resolution and supporting statement below are the sole responsibility of the stockholder and have been reproduced exactly as received by the Company. Neither the Company nor the Board accepts any responsibility for the content of the resolution or the supporting statement, which are included here as required by applicable SEC proxy rules and regulations.

"RESOLVED, that the Stockholders of NSTS Bancorp, Inc. recommend that the Board of Directors engage in an investment banking firm experienced in community bank mergers and acquisitions to guide the Company in promptly taking the reasonable and customary steps to merge or sell NSTS Bancorp, Inc on the best terms available so as to maximize stockholder value.

Supporting Statement

NSTS does not have the size and scale to compete effectively in the 21st century financial world. In fact, a CEO of another Illinois thrift recently stated to me in conversation about the future of micro-cap community banks: "We are all dinosaurs!" Since the IPO in November 2021, NSTS has traded at a significant discount to tangible book value per share. The shareholder proponent believes that NSTS is worth close to or above TBVPS in a sale or merger, and that such sale or merger process to be undertaken is consistent with the Board of Directors Fiduciary duty to all shareholders.

The board of directors can recommend the highest and best offer by "running" the M+A process with their investment banker, and the shareholders will have the final vote on the best offer available.

Since the IPO, this BOD and management have purchased very few shares in the open market. Their economic interests are not well aligned with the shareholders as they will earn board and management fees, salaries, accumulate "freebie" shares, and vest in the ESOP plan over time. They get paid to wait. Meanwhile, the stockholders earn an inadequate return on their equity of less than the risk free rate on T bills, CDs, or money market funds of around 5% at this time of writing. For these and other reasons not included here, this shareholder asks that you vote FOR this proposal."

Board of Directors Statement

The Board, together with Company management, regularly reviews and assesses the Company's performance, future growth prospects, business plans, competitive position, and overall strategic direction. In connection with strategic planning and consideration of strategic alternatives, the Board has from time to time engaged investment banking firms and financial advisors. As a result, the Board currently receives, and will continue to receive, investment banking advice and information on such factors. As part of this ongoing review process, the Board evaluates and considers a variety of potential strategic alternatives available, including pursuing potential strategic transactions with third parties, with the goal of maximizing stockholder value consistent with the requirements of Delaware law and its fiduciary duties.

However, the Board is not recommending a vote for or against Proposal III. Rather, the Board will consider the voting results on Proposal III in its ongoing discussions and considerations, together with any additional stockholder input received in connection with the Annual Meeting and through stockholder engagement. Stockholders should note that this proposal is advisory in nature only and support of this proposal would not, by itself, result in the merger or sale of the Company as contemplated by the proposal, and would not require any action by the Company.

The Board of Directors encourages stockholders to consider and express their views on Proposal III, but takes no position and makes no recommendation on this proposal. Proxies returned without voting instructions will not be voted on Proposal III.

Vote Required

In order to receive the requisite support from stockholders, this non-binding proposal requires the affirmative vote of a majority of the votes cast at the Annual Meeting.

STOCKHOLDER PROPOSALS AND NOMINATIONS

Pursuant to the rules and regulations of the Securities and Exchange Commission, in order to be eligible for inclusion in the proxy materials for the 2026 Annual Meeting of Stockholders, any stockholder proposal to take action at such meeting must be received at NSTS Bancorp, Inc.'s executive office, 700 S. Lewis Avenue, Waukegan, Illinois 60085, no later than December 12, 2025, which is 120 days prior to the first anniversary of the date the Company expects to mail these proxy materials. If the date of the 2026 Annual Meeting of Stockholders is changed by more than 30 days from the date of the previous year's meeting, any stockholder proposal must be received at a reasonable time before the Company prints or mails proxy materials for such meeting. Any such proposals will be subject to the requirements of the proxy rules adopted under the Securities Exchange Act of 1934.

Pursuant to the Company's Bylaws, nominations of persons for election to the Company's Board of Directors and the proposal of business to be transacted by the stockholders at an annual meeting of stockholders may be made (a) pursuant to the Company's notice with respect to such meeting, (b) by or at the direction of the Board of Directors or (c) by any stockholder of record of the Company who was a stockholder of record at the time of the giving of a notice properly provided to the Company, who is entitled to vote at the meeting and who has complied with the notice procedures set forth in the Company's Bylaws.

Section 11C of our Bylaws requires that the Company be given advance written notice of director nominations and other matters that an eligible stockholder wishes to present for action at an annual meeting. In order to be properly brought before an annual meeting of stockholders, any new business or director nomination proposed by a stockholder must be stated in writing, comply with the requirements of the Bylaws, and be delivered to the Corporate Secretary at the Company's principal executive offices not less than 120 days prior to the one-year anniversary of the date of the Company's proxy materials for the preceding year's annual meeting of stockholders. Accordingly, advance written notice for the nomination of a director to the Board of Directors or proposal for other business to be brought before the 2026 annual meeting must be provided by a stockholder to the Company no later than December 12, 2025. If the date of the annual meeting is advanced more than 30 days prior to or delayed by more than 60 days after the anniversary of the preceding year's annual meeting, in order to be considered timely, a stockholder's notice must be delivered not later than the close of business on the 10th day following the day on which public announcement of the date of such annual meeting is first made. Any such stockholder's notice must comply with the provisions and requirements of the Company's proxy statement or form of proxy.

In addition, under the SEC's universal proxy rules, a stockholder intending to solicit proxies in support of director nominees other than the Company's nominees for the 2026 Annual Meeting must provide notice to the Company in accordance with Rule 14a-19 under the Exchange Act no later than March 22, 2026, except that, if the 2026 Annual Meeting is called for a date that is more than 30 days before or more than 30 days after the first anniversary of the Annual Meeting, then such notice must be provided by the later of 60 days prior to the date of the 2026 Annual Meeting or the 10th day following the day on which public announcement of the date of the 2026 Annual Meeting is first made by the Company. The notice requirements under the SEC's universal proxy rules are in addition to the applicable advance notice requirements under the Company's by-laws as described above.

Nothing in this Proxy Statement will be deemed to require the Company to include in our proxy statement and proxy relating to an annual meeting any stockholder proposal that does not meet all of the requirements for inclusion established by the Securities and Exchange Commission in effect at the time such proposal is received.

MISCELLANEOUS

Multiple Stockholders Having the Same Address

As permitted by the SEC's proxy rules, we are providing only one Proxy Statement and one 2024 Annual Report to the address shared by multiple stockholders unless we have received contrary instructions from any stockholder at that address. This practice, known as "householding," reduces duplicate mailings, saves paper and reduces printing costs. Any stockholder residing at such an address who would like to receive an individual copy of the materials, or who is receiving multiple copies of our Proxy Statement and 2024 Annual Report and would prefer to receive a single copy in the future, can notify us by sending a written request to NSTS Bancorp, Inc., c/o Broadridge Householding Department, 51 Mercedes Way, Edgewood, NY 11717, or by calling Broadridge at 1-866-540-7095.

Financial and Other Information

A copy of the Company's 2024 Annual Report will be furnished without charge to stockholders as of the Record Date upon written request to the Corporate Secretary or by calling (847) 336-4430. A copy of the 2024 Annual Report also can be accessed online at the Investor Relations section of the Company's website at www.northshoretrust.com. Additionally, a copy of each of the Company's Audit Committee Charter, Compensation Committee Charter, Nominating and Corporate Governance Committee Charter, Insider Trading Policy and Code of Ethics for Senior Officers is available without charge at the Investor Relations section of the Company's website noted above or in print upon request by any stockholder to the Corporate Secretary at the address noted above.

Other Matters

The Board of Directors is not aware of any business to come before the Annual Meeting other than the matters described above in the Proxy Statement. However, if any matters should properly come before the Annual Meeting, it is intended that the Board of Directors, as holders of the proxies, will act as determined by a majority vote.

By Order of the Board of Directors,

/s/ Christine E. Stickler Christine E. Stickler Corporate Secretary

Waukegan, Illinois April 11, 2025

NSTS BANCORP, INC.

ANNUAL MEETING OF STOCKHOLDERS MAY 21, 2025

THIS REVOCABLE PROXY IS SOLICITED BY THE BOARD OF DIRECTORS

The undersigned hereby appoints, Stephen G. Lear and Carissa H. Schoolcraft and each or either of them as proxies, with full power of substitution, to represent and to vote all the shares of common stock of NSTS Bancorp, Inc. (the "Company"), which the undersigned would be entitled to vote, at the Company's Annual Meeting of Stockholders to be held on May 21, 2025, and at any adjournments thereof, subject to the directions indicated on this Proxy Card.

THIS PROXY, IF PROPERLY SIGNED AND DATED, WILL BE VOTED AS DIRECTED, BUT IF NO INSTRUCTIONS ARE SPECIFIED IT WILL BE VOTED "FOR" THE DIRECTOR NOMINEES AND "FOR" PROPOSAL 2. PROXIES RETURNED WITHOUT VOTING INSTRUCTIONS WILL NOT BE VOTED ON PROPOSAL 3.

Should the undersigned be present and elect to vote at the Annual Meeting or at any adjournment thereof, and after notifying the Company's Corporate Secretary at the Annual Meeting of the undersigned's decision to revoke 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 Company's Corporate Secretary at the address set forth on the Notice of Annual Meeting, by voting via the Internet at a later time or by submitting a signed, later-dated proxy prior to a vote being taken on a proposal at the Annual Meeting.

The undersigned acknowledges receipt from the Company, prior to the execution of this proxy, of the Notice of Annual Meeting and the Proxy Statement for the Annual Meeting, and the 2024 Annual Report on Form 10-K.

Please complete, sign and date this proxy and return it promptly in the enclosed envelope.

The Board of Directors unanimously recommends a vote "FOR" the director nominees and "FOR" proposal 2. The Board of Directors makes no recommendation on proposal 3.

1. Election of Directors for a term expiring at the 2028 Annual Meeting:

| | FOR | WITHHOLD |
|-----------------------|-----|----------|
| 01. Emily E. Ansani | | |
| 02. Thomas M. Ivantic | | |

2. Ratification of the appointment of Plante & Moran, PLLC as independent registered public accounting firm for the year ending December 31, 2025.

| FOR | AGAINST | ABSTAIN |
|-----|---------|---------|
| | | |

3. Non-binding stockholder proposal recommending the sale or merger of the Company, if properly presented at the Annual Meeting.

| D FOR | AGAINST | ABSTAIN |
|-------|---------|---------|
|-------|---------|---------|

Date: _____

Signature of Stockholder

Signature of Stockholder

- NOTE: Please sign exactly as your name appears on this proxy. When signing as attorney, executor, administrator, trustee or guardian, please give full title. If shares are held jointly, each holder should sign but the signature of only one holder is required.
 - I agree to receive all future communications related to these holdings electronically via the email address provided below. I understand I am able to change this selection at any time in the future.

EMAIL ADDRESS:

Voting Instructions

You may vote your proxy in the following ways:

A Login to http://annualgeneralmeetings.com/nsts2025/

A Enter your control number (12 digit number located below)

🖃 Via Mail:

Pacific Stock Transfer Company c/o Proxy Department 6725 Via Austi Parkway, Suite 300 Las Vegas, Nevada 89119

CONTROL NUMBER

You may vote by Internet 24 hours a day, 7 days a week. Internet voting is available through 11:59 p.m., Central Time, on May 20, 2025.

Your Internet vote authorizes the named proxies to vote in the same manner as if you marked, signed and returned your proxy card.

NSTS BANCORP, INC.

ANNUAL MEETING OF STOCKHOLDERS MAY 21, 2025 ESOP Proxy Card

THIS REVOCABLE PROXY IS SOLICITED BY THE BOARD OF DIRECTORS

The undersigned hereby appoints, Stephen G. Lear and Carissa H. Schoolcraft and each or either of them as proxies, with full power of substitution, to represent and to vote all the shares of common stock of NSTS Bancorp, Inc. (the "Company"), which the undersigned would be entitled to vote, at the Company's Annual Meeting of Stockholders to be held on May 21, 2025, and at any adjournments thereof, subject to the directions indicated on this Proxy Card.

THIS PROXY, IF PROPERLY SIGNED AND DATED, WILL BE VOTED AS DIRECTED, BUT IF NO INSTRUCTIONS ARE SPECIFIED IT WILL BE VOTED "FOR" THE DIRECTOR NOMINEES AND "FOR" PROPOSAL 2. PROXIES RETURNED WITHOUT VOTING INSTRUCTIONS WILL NOT BE VOTED ON PROPOSAL 3.

Should the undersigned be present and elect to vote at the Annual Meeting or at any adjournment thereof, and after notifying the Company's Corporate Secretary at the Annual Meeting of the undersigned's decision to revoke 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 Company's Corporate Secretary at the address set forth on the Notice of Annual Meeting, by voting via the Internet at a later time or by submitting a signed, later-dated proxy prior to a vote being taken on a proposal at the Annual Meeting.

The undersigned acknowledges receipt from the Company, prior to the execution of this proxy, of the Notice of Annual Meeting and the Proxy Statement for the Annual Meeting, and the 2024 Annual Report on Form 10-K.

Please complete, sign and date this proxy and return it promptly in the enclosed envelope.

The Board of Directors unanimously recommends a vote "FOR" the director nominees and "FOR" proposal 2. The Board of Directors makes no recommendation on proposal 3.

1. Election of Directors for a term expiring at the 2028 Annual Meeting:

| 01. Emily F. Ansani | FOR | WITHHOLD | | |
|-----------------------|-----|----------|--|--|
| 01. Emily E. Ansani | | | | |
| 02. Thomas M. Ivantic | | | | |

 Ratification of the appointment of Plante & Moran, PLLC as independent registered public accounting firm for the year ending December 31, 2025.

| FOR | | AGAINST | | ABSTAIN |
|-----|--|---------|--|---------|
|-----|--|---------|--|---------|

3. Non-binding stockholder proposal recommending the sale or merger of the Company, if properly presented at the Annual Meeting.

| I FOR I | A | GAINST | | ABSTAIN |
|---------|---|--------|--|---------|
|---------|---|--------|--|---------|

Date:

Signature of Stockholder

Signature of Stockholder

NOTE: Please sign exactly as your name appears on this proxy. When signing as attorney, executor, administrator, trustee or guardian, please give full title. If shares are held jointly, each holder should sign but the signature of only one holder is required.

Voting Instructions

You may vote your proxy in the following ways:

🖑 Via Internet:

A Login to http://annualgeneralmeetings.com/nsts2025/

A Enter your control number (12 digit number located below)

🖃 Via Mail:

Pacific Stock Transfer Company c/o Proxy Department 6725 Via Austi Parkway, Suite 300 Las Vegas, Nevada 89119

CONTROL NUMBER

You may vote by Internet 24 hours a day, 7 days a week. Internet voting is available through 11:59 p.m., Central Time, on May 20, 2025.

Your Internet vote authorizes the named proxies to vote in the same manner as if you marked, signed and returned your proxy card.