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Prospectus Supplement dated March 6, 2006

This supplements the prospectus of Lake Shore Bancorp, Inc. dated February 13, 2006. This prospectus supplement is being sent to Lake Shore Savings and Loan Association depositors who were mailed subscription offering materials, including the prospectus and stock order form on February 22, 2006, and should be read carefully with the entire prospectus.

## **Management – Recent Events**

On March 6, 2006, David C. Mancuso, President and Chief Executive Officer of Lake Shore Bancorp, Inc. and Lake Shore Savings and Loan Association, announced that Robert L. Smith has resigned from his positions as Chief Financial Officer of Lake Shore Bancorp and Lake Shore Savings effective March 17, 2006. Mr. Smith has accepted the position of Plant Controller at the Nestlé Purina Petcare Company in Dunkirk, New York. Prior to joining Lake Shore Savings in 2004, Mr. Smith was employed in various financial positions at Purina since 1976. Mr. Mancuso also announced that Rachel A. Foley, Lake Shore Savings' Controller, has been promoted to Chief Financial Officer of Lake Shore Bancorp and Lake Shore Savings effective March 17, 2006.

Ms. Foley, age 37, has been Lake Shore Savings' Controller since 1999. Prior to joining Lake Shore Savings, Ms. Foley was a Financial Audit Supervisor within the Internal Audit Department at M&T Bank in Buffalo, New York. Ms. Foley is the daughter of Dr. James P. Foley, who serves on the Board of Directors of Lake Shore Bancorp and Lake Shore Savings.

Mr. Smith has confirmed his intention, as previously disclosed on page 116 of the prospectus, to purchase 20,000 shares of Lake Shore Bancorp common stock having a value of \$200,000. Subject to the availability of shares in the offering, Ms. Foley intends to purchase 500 shares of Lake Shore Bancorp common stock having a value of \$5,000. Assuming that she purchases all of these shares, Ms. Foley's purchase would bring the total anticipated subscriptions of our directors, executive officers and their associates to 90,100 shares or \$901,000 (inclusive of the 20,000 shares expected to be purchased by Mr. Smith). Subscriptions by this group would represent 3.8% of the shares sold at the midpoint of the offering range including shares issued to the foundation.

## Right to Rescind Stock Orders and Obtain a Refund

As a result of the management changes described above, each subscriber who has previously submitted an order form and payment for shares of Lake Shore Bancorp common

stock is hereby being granted the opportunity to reduce or rescind his or her stock order and to obtain a full or partial refund, as applicable. If a subscriber intends to reduce or rescind his or her previously placed stock order, a completed and signed change order form must be received by the Stock Information Center by 11:00 a.m. on March 16, 2006, the previously announced expiration of the offering (facsimiles will be accepted). In order to obtain a change order form, a subscriber must contact the Stock Information Center at (800) 806-8430. It is recommended that contact be made no later than March 13, 2006. Subscribers who reduce or rescind their previously submitted stock orders will receive a full or partial refund, as applicable. Such subscribers who submitted a check or money order with their stock order form will receive a check consisting of the applicable refund, with interest calculated at Lake Shore Savings' passbook savings rate, from the date the order was received by the Stock Information Center. Subscribers who, on their stock order forms, authorized withdrawal from Lake Shore Savings deposit accounts will have the hold on their accounts released.

Lake Shore Savings depositors who have not subscribed for shares of Lake Shore Bancorp common stock as of this time may do so by using the stock order form and return envelope previously mailed to them on February 22, 2006. The offering is expected to terminate at 11:00 a.m., Eastern Time, on March 16, 2006.

If you have any questions regarding this prospectus supplement, please contact the Stock Information Center at (800) 806-8430, Monday through Friday, between the hours of 10:00 a.m. and 4:00 p.m., Eastern Time.