UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-4 REGISTRATION STATEMENT

UNDER
THE SECURITIES ACT OF 1933

PATHFINDER BANCORP, INC.

(Exact name of registrant as specified in its charter)

Maryland (State or other jurisdiction of incorporation or organization) 6022 (Primary Standard Industrial Classification Code Number) 38-3941859 (I.R.S. Employer Identification Number)

214 West First Street Oswego, NY 13126 (315) 343-0057

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

Thomas W. Schneider President and Chief Executive Officer Pathfinder Bancorp, Inc. 214 West First Street Oswego, NY 13126 (315) 343-0057

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to:

Benjamin M. Azoff, Esq. Gregory Sobczak, Esq. Luse Gorman, PC 5335 Wisconsin Avenue, N.W., Suite 780 Washington, D.C. 20015 (202) 274-2000

Approximate date of commencer	nent of proposed sale of the securi	ties to the public: As soon as practicabl	le after this registration statement b	pecomes effective.

following box. \square	stered on this rothi are being offered in connection with the formation of a holding company and there is compliance	with General instruction G, check	ше
	ter additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list tive registration statement for the same offering. \Box	he Securities Act registration stater	nent
	tive amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act statement for the same offering. \Box	ct registration statement number of	the
	ether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or rated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange		the
Large accelerated filer		Accelerated filer	
Non-accelerated filer		Smaller reporting company	X
		Emerging growth company	
If an emerging growth con	many indicate by check mark if the registrant has elected not to use the extended transaction period for complying with a	ny new or revised financial accoun	ting

If applicable, place an X in the box to designate the appropriate rule provision relied upon in conducting this transaction:

Exchange Act Rule 13e-4(i) (Cross-Border Issuer Tender Offer) □ Exchange Act Rule 14d-1(d) (Cross-Border Third-Party Tender Offer) □

standards provided pursuant to Section 13(a) of the Exchange Act. \Box

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price per Note	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
5.50% Fixed-to-Floating Rate Subordinated Notes due 2030	\$25,000,000	100%	\$25,000,000	\$2,728(1)

⁽¹⁾ Calculated in accordance with Section 6(b) and Rule 457(f) under the Securities Act at a rate equal to 0.0001091 multiplied by the proposed maximum aggregate offering price.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

THE INFORMATION IN THIS PROSPECTUS IS NOT COMPLETE AND MAY BE CHANGED. A REGISTRATION STATEMENT RELATING TO THESE SECURITIES HAS BEEN FILED WITH THE SECURITIES AND EXCHANGE COMMISSION. WE MAY NOT COMPLETE THE EXCHANGE OFFER AND ISSUE THESE SECURITIES UNTIL SUCH REGISTRATION STATEMENT IS EFFECTIVE. THIS PROSPECTUS IS NOT AN OFFER TO SELL THESE SECURITIES AND IT IS NOT SOLICITING AN OFFER TO BUY THESE SECURITIES IN ANY JURISDICTION WHERE THE OFFER OR SALE IS NOT PERMITTED.

SUBJECT TO COMPLETION, DATED OCTOBER 30, 2020

PROSPECTUS



Offer to Exchange
Up to \$25,000,000 in aggregate principal amount of
5.50% Fixed-to-Floating Rate Subordinated Notes due 2030
that have been registered under the Securities Act of 1933, as amended,
for any and all outstanding unregistered
5.50% Fixed-to-Floating Rate Subordinated Notes due 2030

The exchange offer will expire at 5:00 p.m., Eastern time, on [expiration date], unless extended.

We are offering to exchange 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030 that have been registered under the Securities Act of 1933, as amended, which we refer to in this prospectus as the "New Notes," for any and all of our outstanding unregistered 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030 that we issued in a private placement on October 14, 2020, which we refer to in this prospectus as the "Old Notes." We are making this offer to exchange the New Notes for the Old Notes to satisfy our obligations under a registration rights agreement that we entered into with the purchasers of the Old Notes in connection with our issuance of the Old Notes to those purchasers.

We will not receive any cash proceeds from the exchange offer. The issuance of the New Notes in exchange for the Old Notes will not result in any increase in our outstanding indebtedness. Old Notes that are not exchanged for New Notes in the exchange offer will remain outstanding. The exchange offer is not subject to any minimum tender condition, but is subject to certain customary conditions.

Subject to the terms of the exchange offer, following the expiration or termination of the exchange offer, we will exchange Old Notes that have been validly tendered and not validly withdrawn prior to such expiration or termination for an equal principal amount of New Notes. The terms of the New Notes are identical in all material respects to the terms of the Old Notes, except that: the New Notes have been registered with the Securities and Exchange Commission under the Securities Act of 1933, as amended, and, as a result, will not bear any legend restricting their transfer; the New Notes bear a different CUSIP number from the Old Notes; the New Notes are generally not subject to transfer restrictions; holders of the New Notes are not entitled to registration rights under the registration rights agreement that we entered into with the purchasers of the Old Notes; and because the holders of the New Notes are not entitled to registration rights, holders of the New Notes will not have the right to additional interest under the circumstances described in that registration rights agreement relating to our fulfillment of our registration obligations. The New Notes evidence the same debt as the Old Notes and are governed by the same indenture under which the Old Notes were issued.

The New Notes are a new issue of securities with no established trading market, and we do not expect any public market to develop in the future for the New Notes. The Old Notes are not listed on any national securities exchange or quotation system, and we do not intend to apply for listing of the New Notes on any national securities exchange or quotation system.

Except as otherwise provided in this prospectus, you may validly withdraw your tender of Old Notes at any time prior to 5:00 p.m., Eastern time, on [expiration date], the expiration date of the exchange offer.

Any broker-dealer that holds Old Notes acquired for its own account as a result of market-making activities or other trading activities and that receives New Notes for its own account pursuant to the exchange offer may be a statutory underwriter and must acknowledge that it will deliver a prospectus meeting the requirements of the Securities Act of 1933, as amended, in connection with any resale of such New Notes. A broker-dealer that acquired Old Notes because of market-making or other trading activities may use this prospectus, as supplemented or amended from time to time, in connection with resales of the New Notes for a period of 180 days after the completion of the exchange offer. See "Plan of Distribution."

Investing in our securities involves certain risks. See "Risk Factors" beginning on page 8.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The securities are not savings accounts, deposits or obligations of any bank and are not insured by the Federal Deposit Insurance Corporation or any other governmental agency.

The date of this prospectus is	, 2020
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ABOUT THIS PROSPECTUS

This prospectus is part of a Registration Statement on Form S-4, which we refer to as the "registration statement," that we have filed with the Securities and Exchange Commission (the "SEC") under the Securities Act of 1933, as amended (the "Securities Act"). This prospectus does not contain all the information set forth in the registration statement, certain parts of which are omitted in accordance with the rules and regulations of the SEC. For further information with respect to us, the exchange offer and the securities offered by this prospectus, reference is made to the registration statement, including the exhibits to the registration statement.

We are providing this prospectus to holders of Old Notes in connection with our offer to exchange Old Notes for New Notes. We are not making the exchange offer to, nor will we accept tenders for exchange from, holders of Old Notes in any jurisdiction in which the exchange offer or the acceptance of the exchange offer would not be in compliance with the securities or blue sky laws of such jurisdiction.

You should read this prospectus together with the additional information described under the heading "Where You Can Find More Information" and in the accompanying letter of transmittal filed by us with the SEC. We have not authorized any other person to provide you with any other information with regard to the exchange offer. If anyone provides you with information that is different or inconsistent, you should not rely on it. You should not assume that any information contained in the registration statement of which this prospectus is a part is accurate as of any date other than the date of the applicable document that contains such information. Our business, financial condition, results of operations and prospects may have changed since such date.

The registration statement of which this prospectus is a part, including the exhibits to the registration statement, contains additional information about us and the securities offered under this prospectus. The registration statement can be obtained from the SEC's website, www.sec.gov. Copies of certain information filed by us with the SEC are also available on our website at www.pathfinderbank.com. The reference to our website is not intended to be an active link, and the information on, or that can be accessed through, our website is not, and you must not consider the information to be, a part of this prospectus or any other filings we make with the SEC.

You should not consider any information in this prospectus to be investment, legal or tax advice. You should consult your own counsel, accountant and other advisors for legal, tax, business, financial and related advice regarding the exchange offer and ownership of these securities.

Any broker-dealer that holds Old Notes acquired for its own account as a result of market-making activities or other trading activities and receives New Notes for its own account pursuant to the exchange offer may be a statutory underwriter and must acknowledge that it will deliver a prospectus meeting the requirements of the Securities Act in connection with any resale of such New Notes. This prospectus, as it may be amended or supplemented from time to time, may be used by any such broker-dealer in connection with any resale of New Notes received in exchange for such Old Notes. We will make additional copies of this prospectus, and any amendments or supplements hereto, available to any such broker-dealer that so requests in accordance with the instructions in the letter of transmittal. See "Plan of Distribution."

Unless otherwise indicated or the context otherwise requires, as used in this prospectus, the terms "we," "us," "our," "Pathfinder" or the "Company" refer to Pathfinder Bancorp, Inc. and its consolidated subsidiaries, and the term the "Bank" refers to Pathfinder Bank, the wholly-owned subsidiary of the Company.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and therefore we file annual, quarterly and current reports, proxy statements and other documents with the SEC. Our SEC filings are available to the public on the SEC's website at www.sec.gov. We also maintain a website at www.pathfinderbank.com. The reference to our website is not intended to be an active link and the information on, or that can be accessed through, our website is not, and you must not consider the information to be, a part of this prospectus or any other filings we make with the SEC.

Holders of the Old Notes may request a copy of these SEC filings, at no cost, by contacting us at the following address or telephone number:

Pathfinder Bancorp, Inc. Attention: Walter F. Rusnak 214 West First Street Oswego, New York 13126 (315) 343-0057

To ensure timely delivery of any requested information, holders of the Old Notes must make any request no later than $[\cdot]$, 2020, which is five business days before the expiration date of the exchange offer, or, if we decide to extend the expiration date of the exchange offer, no later than five business days before such extended expiration date.

This prospectus is part of the registration statement and does not contain all of the information in the registration statement. The registration statement, including the exhibits thereto, contains additional relevant information about us, the New Notes and the exchange offer.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus may contain certain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended (the "Securities Act"), and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), that involve substantial risks and uncertainties. When used in this prospectus, the words "anticipate," "believe," "estimate," "expect," "intend," "may," "plan," "seek," and similar expressions identify such forward-looking statements. These forward-looking statements include statements regarding the Company's business plans, prospects, growth and operating strategies, statements regarding the asset quality of the Company's loan and investment portfolios, and estimates of the Company's risks and future costs and benefits.

These forward-looking statements are based largely on the expectations of the Company's management and are subject to a number of risks and uncertainties, including but not limited to: credit quality and the effect of credit quality on the adequacy of our allowance for loan losses; deterioration in financial markets that may result in impairment charges relating to our securities portfolio; competition in our primary market areas; changes in interest rates and national or regional economic conditions; changes in monetary and fiscal policies of the U.S. Government, including policies of the U.S. Treasury and the Board of Governors of the Federal Reserve System (the "Federal Reserve Board"); significant government regulations, legislation and potential changes thereto; a reduction in our ability to generate or originate revenue-producing assets as a result of compliance with heightened capital standards; increased cost of operations due to greater regulatory oversight, supervision and examination of banks and bank holding companies, and higher deposit insurance premiums; cyberattacks, computer viruses and other technological threats that may breach the security of our websites or other systems; technological changes that may be more difficult or expensive than expected; limitations on our ability to expand consumer product and service offerings due to anticipated stricter consumer protection laws and regulations; and other factors discussed elsewhere in this prospectus, in particular the "Risk Factors" section beginning on page 8, as well as in the Company's periodic reports filed with the SEC. Many of these factors are beyond the Company's control and are difficult to predict. In addition, the COVID-19 pandemic in the United States has had and is expected to continue to have a significant adverse impact on the economy, the banking industry and the Company. While the full impact of COVID-19 on future financial results is uncertain and not currently predictable, the Company believes that the pandemic's impact coul

Because of these and other uncertainties, the Company's actual results, performance or achievements could differ materially from those contemplated, expressed or implied by the forward-looking statements contained herein. Forward-looking statements speak only as of the date they are made. The Company undertakes no obligation to publicly update or revise forward-looking information, whether as a result of new, updated information, future events or otherwise, except to the extent required by law.

SUMMARY

This summary highlights selected information appearing elsewhere in this prospectus and is therefore qualified in its entirety by the more detailed information appearing elsewhere in this prospectus. This summary may not contain all of the information that may be important to you or that you should consider in deciding to exchange your Old Notes for New Notes. We urge you to read carefully this entire prospectus and the other documents to which it refers to understand fully the terms of the New Notes and the exchange offer. You should pay special attention to the sections entitled "Risk Factors" and "Cautionary Note Regarding Forward-Looking Statements."

Pathfinder Bancorp, Inc.

Pathfinder Bancorp, Inc. is a Maryland corporation headquartered in Oswego, New York. The primary business of the Company is its investment in Pathfinder Bank, which is 100% owned by the Company. The Company is subject to supervision and regulation by the Federal Reserve Board. Pathfinder Bank is a commercial bank chartered by the New York State Department of Financial Services (the "NYSDFS"). At June 30, 2020, the Company and subsidiaries had total consolidated assets of \$1.2 billion, total consolidated liabilities of \$1.1 billion and shareholders' equity of \$92.0 million.

The Company owns a non-consolidated Delaware statutory trust subsidiary, Pathfinder Statutory Trust II, of which 100% of the common equity is owned by the Company, Pathfinder Statutory Trust II was formed in connection with the issuance of \$5.2 million in trust preferred securities.

The Company's executive office is located at 214 West First Street, Oswego, New York and the telephone number at that address is (315) 343-0057. The Company's common stock trades on the NASDAQ Capital Market under the symbol "PBHC." Its internet address is www.pathfinderbank.com. Information on our website is not and should not be considered to be a part of this prospectus.

The Bank is a New York-chartered commercial bank and its deposit accounts are insured up to applicable limits by the Federal Deposit Insurance Corporation ("FDIC") through the Deposit Insurance Fund. The Bank is subject to extensive regulation by the NYSDFS, as its chartering agency, and by the FDIC, as its deposit insurer and primary federal regulator. The Bank is a member of the Federal Home Loan Bank of New York and is also subject to certain regulations by the Federal Home Loan Bank System.

The Bank is primarily engaged in the business of attracting deposits from the general public in the Bank's market area, and investing such deposits, together with other sources of funds, in loans secured by residential and commercial real estate, and commercial business and consumer assets other than real estate. In addition, the Bank originates unsecured small business and consumer loans. The Bank also invests a portion of its assets in a broad range of debt securities issued by the United States Government and its agencies and sponsored enterprises, state and municipal governments and agencies, and corporations. The Company also invests in mortgage-backed securities issued or guaranteed by United States Government sponsored enterprises, collateralized mortgage obligations and similar debt securities issued by both government sponsored entities and private (non-governmental) issuers, and asset-backed securities that are generally issued by private entities. The Company invests primarily in debt securities but will, within certain regulatory limits, invest from time to time in mutual funds and equity securities. The Bank's principal sources of funds are deposits, principal and interest payments on loans and investments, as well as borrowings from correspondent financial institutions. The principal source of the Company's income is interest on loans and investment securities. The Bank's principal expenses are interest paid on deposits and borrowed funds, employee compensation and benefits, data processing and facilities.

The Bank also owns 100% of Whispering Oaks Development Corp. ("Whispering Oaks"), a New York corporation that is retained to operate or develop real estate-related projects. At June 30, 2020, Whispering Oaks operated a small tenant-occupied commercial building that houses an ATM facility for the Bank, and, through a

wholly-owned second-tier subsidiary, is the sole limited partner in an unconsolidated special-purpose real estate management partnership. The partnership currently operates a low-income residential housing facility. Additionally, the Bank owns 100% of Pathfinder Risk Management Company, Inc., which was established to record the 51% controlling interest upon the December 2013 purchase of the FitzGibbons Agency, an Oswego County property, casualty and life insurance brokerage business.

Summary of the Exchange Offer

The following provides a summary of certain terms of the exchange offer. See "The Exchange Offer" appearing elsewhere in this prospectus for a more complete description of the exchange offer and "Description of the Notes" for a more complete description of the terms of the Old Notes and the New Notes.

Old Notes

New Notes

Exchange Offer

Expiration Date

Withdrawal Rights

Conditions to Exchange Offer

\$25,000,000 in aggregate principal amount of 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030.

Up to \$25,000,000 in aggregate principal amount of 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030 that have terms that are identical in all material respects to the terms of the Old Notes, except that: the New Notes have been registered with the SEC under the Securities Act and, as a result, will not bear any legend restricting their transfer; the New Notes bear a different CUSIP number from the Old Notes; the New Notes are generally not subject to transfer restrictions; holders of the New Notes are not entitled to registration rights under the registration rights agreement that we entered into with the initial purchasers of the Old Notes or otherwise; and because the holders of the New Notes are not entitled to registration rights, holders of the New Notes will not have the right to additional interest under the circumstances described in the registration rights agreement relating to our fulfillment of our registration obligations.

We are offering to exchange the New Notes for a like principal amount of Old Notes. Subject to the terms of the exchange offer, following the expiration or termination of the exchange offer, we will exchange Old Notes that have been validly tendered and not validly withdrawn prior to such expiration or termination for an equal principal amount of New Notes

The exchange offer will expire at 5:00 p.m., Eastern time, on [expiration date], unless extended.

Except as otherwise provided in this prospectus, you may validly withdraw your tender of Old Notes at any time prior to 5:00 p.m., Eastern time, on the expiration date. For a withdrawal of tendered Old Notes to be effective, the exchange agent must receive, on or prior to 5:00 p.m., Eastern time on the expiration date, a computer-generated notice of withdrawal, transmitted by Depository Trust Company ("DTC"), on your behalf in accordance with the appropriate procedures of DTC's Automated Tender Offer Program ("ATOP"). See "The Exchange Offer—Withdrawal of Tenders."

The exchange offer is subject to customary conditions, which we may waive. See "The Exchange Offer—Conditions."

Procedures for Tendering Old Notes

Since the Old Notes were issued in book-entry form, and all of the Old Notes are currently represented by global certificates held for the account of DTC, as depositary, DTC or its nominee is treated as the registered holder of the Old Notes and will be the only entity that can tender your Old Notes for New Notes.

In order to participate in the exchange offer, you must follow the procedures established by DTC for tendering Old Notes held in book-entry form. DTC's ATOP procedures require that, prior to the expiration date of the exchange offer, (i) DTC receives (a) your instructions to exchange your Old Notes and (b) your agreement to be bound by the terms of the accompanying letter of transmittal, and (ii) the exchange agent receives a computer generated message known as an "agent's message" that is transmitted through ATOP.

Please note that by using the ATOP procedures to tender and exchange Old Notes, you will be bound by the terms of the accompanying letter of transmittal, and you will be deemed to have made the acknowledgments and representations it contains. See "The Exchange Offer—Eligibility; Transferability" and "The Exchange Offer—Representations."

The exchange of Old Notes for New Notes in the exchange offer generally should not constitute a taxable event for U.S. federal income tax purposes. See "Material United States Federal Income Tax Considerations." You should consult your own tax advisor as to the tax consequences of exchanging your Old Notes for New Notes.

Under the terms of the registration rights agreement that we entered into with the initial purchasers of the Old Notes at the time we issued the Old Notes, we agreed to register the New Notes and undertake the exchange offer. The exchange offer is intended to satisfy the rights of holders of Old Notes under that registration rights agreement. After the exchange offer is completed, we will have no further obligations, except under certain limited circumstances, to provide for any exchange or undertake any further registration with respect to the Old Notes.

Based on existing interpretations of the Securities Act by the staff of the SEC set forth in several no-action letters issued to other parties, we believe that you, or any other person receiving New Notes, may offer for resale, resell or otherwise transfer the New Notes without complying with the registration and prospectus delivery requirements of the Securities Act, provided that:

- you are, or the person receiving the New Notes is, acquiring the New Notes in the ordinary course of business;
- you do not, nor does any such person, have an arrangement or understanding with any
 person to participate in any distribution (within the meaning of the Securities Act) of
 the New Notes;
- you are not, nor is any such person, an "affiliate" of ours within the meaning of Rule 405 under the Securities Act;

Material United States Federal Income Tax Considerations

Registration Rights

Transferability

 you are not, nor is any such person, a broker-dealer registered under the Exchange Act, and you are not engaged in, nor is any such person engaged in, and do not intend to engage in, any distribution (within the meaning of the Securities Act) of the New Notes; and

 you are not acting on behalf of any person who could not truthfully make these statements.

Our belief that transfers of New Notes would be permitted without complying with the registration and prospectus delivery requirements of the Securities Act under the conditions described above is based on interpretations by the staff of the SEC given to other, unrelated issuers in similar exchange offers. The staff of the SEC has not considered the exchange offer in the context of a no-action letter, and we cannot assure you that the staff of the SEC would make a similar interpretation with respect to the exchange offer. If our belief is not accurate and you transfer a New Note without delivering a prospectus meeting the requirements of the Securities Act or without an exemption from such requirements, you may incur liability under the Securities Act. We do not and will not assume, or indemnify you against, such liability. See "Risk Factors—Risks Related to the Exchange Offer."

Any broker-dealer that holds Old Notes acquired for its own account as a result of market-making activities or other trading activities and that receives New Notes for its own account pursuant to the exchange offer may be a statutory underwriter and must acknowledge that it will deliver a prospectus meeting the requirements of the Securities Act in connection with any resale of such New Notes. See "Plan of Distribution."

Any Old Notes that are not exchanged in the exchange offer will continue to be governed by the applicable indenture relating to the Old Notes and the terms of the Old Notes. Old Notes that are not exchanged will remain "restricted securities" within the meaning of Rule 144(a) (3) under the Securities Act and will be subject to the restrictions on transfer described in the Old Notes, and you will generally not be able to offer, sell, pledge or otherwise transfer the Old Notes, except to us or to any of our subsidiaries, under a registration statement that has been declared effective under the Securities Act or under an exemption from the requirements of the Securities Act. Upon the completion of the exchange offer, we will have no further obligations, except under limited circumstances, to provide for any exchange or undertake any further registration with respect to the Old Notes. If you do not participate in the exchange offer, the liquidity of your Old Notes could be adversely affected. See "Risk Factors—Risks Related to the Exchange Offer" and "The Exchange Offer—Consequences of Failure to Exchange."

We will not receive any cash proceeds from the exchange of Old Notes for New Notes as a result of the exchange offer. Subject to certain exceptions, we will pay all expenses incident to the exchange offer.

Consequences of Failing to Exchange Old Notes

Use of Proceeds

Cancellation of Exchanged Old Notes

Old Notes that are surrendered in exchange for New Notes will be retired and cancelled and will not be reissued. Accordingly, the issuance of the New Notes under the exchange offer will not result in any increase in our outstanding indebtedness.

Exchange Agent

UMB Bank, N.A. is serving as the exchange agent for the exchange offer. See "The Exchange Offer—Exchange Agent" for the address, telephone number and email address of the exchange agent.

Summary of the New Notes

Form and Denomination

The following provides a summary of certain terms of the New Notes. The New Notes have terms that are identical in all material respects to the terms of the Old Notes, except that: the New Notes have been registered with the SEC under the Securities Act and, as a result, will not bear any legend restricting their transfer; the New Notes bear a different CUSIP number from the Old Notes; the New Notes are generally not subject to transfer restrictions; holders of the New Notes are not entitled to registration rights under the registration rights agreement that we entered into with the initial purchasers of the Old Notes; and because the holders of the New Notes are not entitled to registration rights, holders of the New Notes will not have the right to additional interest under the circumstances described in the registration rights agreement relating to our fulfillment of our registration obligations. The New Notes will evidence the same debt as the Old Notes and will be governed by the same indenture under which the Old Notes were issued. See "Description of the Notes" for a more complete description of the terms of the New Notes. References in this prospectus to the "notes" include both the Old Notes and the New Notes unless otherwise indicated or the context otherwise requires. Unless otherwise indicated or the context otherwise requires, as used in this summary, "we," "our," "us" and the "Company" refer only to Pathfinder Bancorp, Inc. and not to any of its subsidiaries.

Issuer Pathfinder Bancorp, Inc.

5.50% Fixed-to-Floating Rate Subordinated Notes due 2030. Securities

Aggregate Principal Amount Up to \$25,000,000.

Stated Maturity October 15, 2030, unless previously redeemed.

The New Notes will be issued only in registered form without coupons and in minimum denominations of \$100,000 and any integral multiple of \$1,000 in excess thereof. Unless otherwise required for institutional accredited investors, the New Notes will be evidenced by a global note deposited with the trustee for the New Notes, as custodian for DTC, and transfers of beneficial interests will be facilitated only through records maintained by DTC and its participants.

Interest Rate and Interest Rate Payment Dates During

Fixed Interest Period

From and including October 14, 2020 to but excluding October 15, 2025 or any earlier redemption date, the New Notes will bear interest at a fixed annual rate equal to 5.50%, payable semi-annually in arrears on April 15 and October 15 of each year, beginning on April 15, 2021. This is referred to as the Fixed Interest Period.

Interest Rate and Interest Rate Payment Dates During Floating Interest Period

From and including October 15, 2025 to but excluding the stated maturity or any earlier redemption date, the New Notes will bear interest at an annual floating rate, reset quarterly, equal to the Floating Interest Rate (as defined below) determined on the Floating Interest Determination Date (as defined below) for the applicable Floating Interest Period (as defined below) (provided

Day Count Convention

Record Dates

Subordination; Ranking

that in the event that the Floating Interest Rate for the applicable Floating Interest Period is less than zero, the Floating Interest Rate for such Floating Interest Period will be deemed to be zero), plus 532 basis points, payable quarterly in arrears on January 15, April 15, July 15 and October 15 of each year.

See "Description of the Notes—Determination of Floating Interest Rate" for the definition of the Floating Interest Rate, which will initially be Three-Month Term SOFR, as well as a description of the method of its determination, and the alternative methods for determining the applicable Floating Interest Rate for the notes under certain circumstances.

During the Fixed Interest Period: 30-day month/360-day year.

During the Floating Interest Period: 360-day year and the number of actual days elapsed.

We will make each interest payment to the holders of record of the New Notes at the close of business on the fifteenth calendar day prior to the applicable interest payment date, without regard to whether such day is a business day.

The New Notes will be our general unsecured, subordinated obligations and:

- will rank junior in right of payment and upon liquidation to our existing and future "senior indebtedness" (as defined below);
- will rank equally in right of payment and upon liquidation to our existing and future unsecured indebtedness, the terms of which provide that such indebtedness ranks equally with promissory notes, bonds, debentures and other evidences of indebtedness of types that include the New Notes;
- will rank senior in right of payment and upon liquidation to our existing and future indebtedness, the terms of which provide that such indebtedness ranks junior to promissory notes, bonds, debentures and other evidences of indebtedness of types that include the New Notes; and
- will be effectively subordinated to the existing and future indebtedness, deposits and other liabilities of the Company and our subsidiaries, including without limitation the Bank's deposit liabilities and claims of other creditors of the Bank.

As of June 30, 2020, the Company and its subsidiaries had, in the aggregate, outstanding debt, deposits and other liabilities of \$1.07 billion. As of June 30, 2020, the Company had \$1.06 million of indebtedness that would rank senior to the New Notes (other than the Old Notes), and \$5.1 million of indebtedness that would rank subordinate to the New Notes.

See "Description of the Notes—Subordination."

Optional Redemption

No Limitations On Indebtedness

Limited Indenture Covenants

Listing; No Public Market

Risk Factors

Trustee

Governing Law

We may, at our option, redeem the New Notes (i) in whole or in part on October 15, 2025 and at any time thereafter, and (ii) in whole but not in part, at any time upon the occurrence of a Tier 2 Capital Event, Tax Event or an Investment Company Event (each as defined below in "Description of the Notes—Redemption").

Any redemption of the New Notes will be at a redemption price equal to 100% of the principal amount of the notes to be redeemed, plus accrued and unpaid interest to, but excluding, the date of redemption. Any redemption of the New Notes will be subject to any required regulatory approvals, including from the Federal Reserve Board, to the extent such approval is then required.

The New Notes will not be entitled to the benefit of any sinking fund.

The indenture governing the New Notes and the terms of the New Notes do not contain any covenants or restrictions on the incurrence of indebtedness or other obligations by us or by a subsidiary of ours, including the Bank.

The indenture governing the New Notes contains no financial covenants requiring us to achieve or maintain any minimum financial results relating to our financial position or results of operations or meet or exceed any financial ratios as a general matter or in order to incur additional indebtedness or obligations or to maintain any reserves.

Moreover, neither the indenture nor the New Notes contain any covenants limiting our right to grant liens on our assets to secure our indebtedness or other obligations that are senior in right of payment to the New Notes, repurchase our stock or other securities, including any of the New Notes, or pay dividends or make other distributions to our shareholders (except, subject to certain limited exceptions, in the case of dividends or other distributions; redemptions, purchases, acquisitions or liquidation payments with respect to our capital stock; and repayments, repurchases or redemptions of any debt securities that rank equal with or junior to the notes, in each case, upon our failure to make any required payment of principal or interest on the notes, when the same becomes due and payable).

The New Notes are a new issue of securities with no established trading market and we do not expect any public market to develop in the future for the New Notes. The Old Notes are not listed on any national securities exchange or quotation system and we do not intend to apply for listing of the New Notes on any national securities exchange or quotation system.

See "Risk Factors" beginning on page 8 of this prospectus, and other information included in this prospectus, including the annexes, for a discussion of factors you should consider carefully before deciding to participate in the exchange offer.

UMB Bank, N.A., or its successor if replaced in accordance with the provisions of the indenture.

The indenture and the New Notes are governed by and will be construed in accordance with the laws of the State of New York.

RISK FACTORS

In addition to the other information contained in this prospectus, including the matters addressed under "Cautionary Note Regarding Forward-Looking Statements" and the information contained in the annexes, you should carefully consider the following risks in deciding whether to participate in the exchange offer. See "Where You Can Find More Information." If any of the risks contained in this prospectus develop into actual events, our business, financial condition, liquidity, results of operations and prospects could be materially and adversely affected, the value of the New Notes could decline, our ability to repay the New Notes may be impaired and you may lose all or part of your investment.

Risks Related to our Business

The economic impact of the COVID-19 outbreak could adversely affect our financial condition and results of operations.

The COVID-19 pandemic has caused significant economic dislocation in the United States as many state and local governments ordered non-essential businesses to close and residents to shelter in place at home. Beginning in the second quarter of 2020, some of these restrictions were removed and some non-essential businesses were allowed to re-open in a limited capacity, adhering to social distancing and disinfection guidelines. It is not clear when the pandemic will abate. This crisis has resulted in an unprecedented slow-down in economic activity and a related increase in unemployment. During the COVID-19 outbreak, stock markets have experienced extreme volatility and in particular bank stocks have significantly declined. In response to the COVID-19 outbreak, the Federal Reserve Board reduced the benchmark fed funds rate to a target range of 0% to 0.25%, and the yields on 10- and 30-year treasury notes declined to historic lows. The State of New York and certain Federal agencies are requiring lenders to provide forbearance and other relief to borrowers (e.g., waiving late payment and other fees). Recent New York legislation allows certain borrowers to seek forbearance on residential mortgage loans (including home equity loans) if financial hardship is demonstrated as a result of COVID-19 for up to 180 days with an option for an additional 180 days. The federal banking agencies have encouraged financial institutions to prudently work with affected Certain industries have been particularly hard-hit, including the travel and hospitality industry, the restaurant industry and the retail industry. Finally, the spread of the coronavirus has caused us to modify our business practices, including employee travel, employee work locations, and cancellation of physical participation in meetings, events and conferences. We have many employees working remotely and we may take further actions as may be required by government authorities or that we determine are in the best interests of our employees, customers and business partn

Given the ongoing and dynamic nature of the circumstances, it is difficult to predict the full impact of the COVID-19 outbreak on our business. The extent of such impact will depend on future developments, which are highly uncertain, including when the coronavirus can be controlled and abated. Further, while jurisdictions in which we operate have gradually allowed the reopening of businesses and other organizations and removed the sheltering restrictions, it is premature to assess whether doing so will result in a meaningful increase in economic activity and the impact of such actions on further COVID-19 cases. As the result of the COVID-19 pandemic and the related adverse local and national economic consequences, we could be subject to any of the following risks, any of which could have a material, adverse effect on our business, financial condition, liquidity, and results of operations:

- Demand for our products and services may decline, making it difficult to grow assets and income;
- If the economy is unable to substantially and successfully reopen, and high levels of unemployment continue for an extended period of time, loan delinquencies, problem assets, and foreclosures may increase, resulting in increased charges and reduced income;
- Collateral for loans, especially real estate, may decline in value, which could cause loan losses to increase;

- Our allowance for credit losses on loans and leases may increase if borrowers experience financial difficulties beyond forbearance periods, which will adversely affect our net income;
- · The net worth and liquidity of loan guarantors may decline, impairing their ability to honor commitments to us;
- A further and sustained decline in our stock price or the occurrence of what management would deem to be a triggering event that could, under certain circumstances, cause management to perform impairment testing on its goodwill or core deposit and customer relationships intangibles that could result in an impairment charge being recorded for that period, that would adversely impact our results of operations and the ability of the Bank to pay dividends to us;
- As a result of the decline in the Federal Reserve Board's target federal funds rate to near 0%, the yield on our assets may decline to a
 greater extent than the decline in our cost of interest-bearing liabilities, reducing our net interest margin and spread and reducing net
 income:
- A material decrease in net income or a net loss over several quarters could result in the elimination of or a decrease in the rate of our quarterly cash dividend,
- Our cyber security risks are increased as the result of an increase in the number of employees working remotely;
- We rely on third party vendors for certain services and the unavailability of a critical service due to the COVID-19 outbreak could have an adverse effect on us;
- · Federal Deposit Insurance Corporation premiums may increase if the agency experience additional resolution costs; and
- We face litigation, regulatory enforcement and reputation risk as a result of our participation in the PPP and the risk that the Small Business Administration may not fund some or all PPP loan guaranties.

Moreover, our future success and profitability substantially depends on the management skills of our executive officers and directors, many of whom have held officer and director positions with us for many years. The unanticipated loss or unavailability of key employees due to the outbreak could harm our ability to operate our business or execute our business strategy. We may not be successful in finding and integrating suitable successors in the event of key employee loss or unavailability.

Any one or a combination of the factors identified above, or other factors, could materially and adversely affect our business, financial condition, results of operations and prospects.

We may be adversely affected by the emergency actions taken by the U.S. government to mitigate the impact of the COVID-19 pandemic on the U.S. economy.

The United States government has taken a number of actions to mitigate the impact of the COVID-19 pandemic on the U.S. economy. Among other steps taken, the Federal Reserve Board cut the federal funds rate in March 2020, and also lowered the interest rate on emergency lending at the discount window and lengthened the term of loans to 90 days. On March 27, 2020, the Coronavirus Aid, Relief and Economic Security Act, or CARES Act was signed into law. Key provisions of the CARES Act include one-time payments to individuals, strengthened unemployment insurance, additional health-care funding, loans and grants to certain businesses, and temporary amendments to the Internal Revenue Code. The Small Business Administration (the "SBA") was tapped to lead the effort to loan funds to small businesses, in conjunction with banks. The Federal Reserve Board and the U.S. Treasury have also responded with lending programs under the CARES Act. Further, the Federal Reserve Board has intervened with a number of credit facilities intended to keep the capital markets liquid.

There can be no assurance that these interventions by the U.S. government will be successful in mitigating the impact of the COVID-19 pandemic and it is unclear what the cumulative effect of these extraordinary actions by the U.S. government will be on the economy as a whole and upon the financial condition and results of operations of the Company and its customers, both in the short-term and the long-term.

We are subject to litigation, regulatory enforcement risk and reputation risk regarding the Bank's participation in the Paycheck Protection Program ("PPP") and the risk that the SBA may not fund some or all PPP loan guaranties.

The CARES Act included a \$349 billion loan program administered through the SBA referred to as the PPP. The \$349 billion in funds for the PPP were exhausted on April 16, 2020. On April 27, 2020, the program was reopened with an additional \$310 billion approved by Congress with an expiration date of August 8, 2020. Under the PPP, small businesses and other entities and individuals could apply for loans from existing SBA lenders and other approved regulated lenders that enrolled in the program, subject to detailed qualifications and eligibility criteria. The Bank, as a participating lender, has originated approximately 680 loans under the PPP aggregating approximately \$73.8 million through June 30, 2020.

Because of the short timeframe between the passing of the CARES Act and implementation of the PPP, some of the rules and guidance relating to PPP were issued after lenders began processing PPP applications. Also, there was and continues to be uncertainty in the laws, rules and guidance relating to the PPP. Since the opening of the PPP, several banks have been subject to litigation regarding the procedures used in processing PPP applications. In addition, some banks and borrowers have received negative media attention associated with PPP loans. Although we believe that we have administered the PPP in accordance with all applicable laws, regulations and guidance, we may be exposed to litigation risk and negative media attention from our participation in the PPP. If any such litigation is filed and is not resolved in in our favor, it may result in significant financial liability to us or adversely affect our reputation. In addition, litigation can be costly, regardless of outcome. Any financial liability, litigation costs or reputational damage caused by PPP-related litigation or media attention could have a material adverse impact on our business, financial condition, and results of operations.

The PPP has also attracted interest from federal and state enforcement authorities, oversight agencies, regulators, and Congressional committees. State Attorneys General and other federal and state agencies may assert that they are not subject to the provisions of the CARES Act and the PPP regulations entitling the Bank to rely on borrower certifications, and take more aggressive action against the Bank for alleged violations of the provisions governing the Bank's participation in the PPP. Federal and state regulators can impose or request that we consent to substantial sanctions, restrictions and requirements if they determine there are violations of laws, rules or regulations or weaknesses or failures with respect to general standards of safety and soundness, which could adversely affect our business, reputation, results of operation and financial condition.

The Bank also has credit risk on PPP loans if the SBA determines that there is a deficiency in the manner in which any loans were originated, funded or serviced by the Bank, including any issue with the eligibility of a borrower to receive a PPP loan. In the event of a loss resulting from a default on a PPP loan and a determination by the SBA that there was a deficiency in the manner in which the PPP loan was originated, funded or serviced by the Bank, the SBA may deny its liability under the guaranty, reduce the amount of the guaranty or, if the SBA has already paid under the guaranty, seek recovery of any loss related to the deficiency from the Bank.

We continue to increase our originations of commercial real estate and commercial loans, and such loans generally carry greater credit risk than loans secured by owner occupied one- to four-family real estate, and these risks will increase as we continue to increase originations of these types of loans.

At June 30, 2020, \$259.4 million, or 32.2% of our loan portfolio, consisted of commercial real estate loans and \$218.1 million, or 27.0% of our loan portfolio, consisted of commercial and tax exempt loans. Given their larger balances and the complexity of the underlying collateral, commercial real estate and commercial loans, which include commercial and industrial loans, generally expose a lender to greater credit risk than loans secured by owner occupied one- to four-family residential real estate. Also, many of our borrowers have more than one of these types of loans outstanding. Consequently, an adverse development with respect to one loan or one credit relationship may expose us to significantly greater risk of loss compared to an adverse development with respect

to a one- to four-family residential real estate loan. These loans also have greater credit risk than residential real estate for the following reasons:

- commercial real estate repayment is generally dependent on income being generated in amounts sufficient to cover operating expenses and debt service.
- commercial loans repayment is generally dependent upon the successful operation of the borrower's business.

If loans that are collateralized by real estate or other business assets become troubled and the value of the collateral has been significantly impaired, then we may not be able to recover the full contractual amount of principal and interest that we anticipated at the time we originated the loan, which could cause us to increase our provision for loan losses which would adversely affect our operating results and financial condition.

A key component of our strategy is to continue to increase our origination of commercial real estate and commercial loans to diversify our loan portfolio and increase our returns or yields on our loan portfolio. Increasing our originations of commercial real estate and commercial loans will significantly increase our exposure to the risks inherent in these types of loans, which risks are noted above.

Changes in interest rates may reduce our profits.

Our profitability, like that of most financial institutions, depends to a large extent upon our net interest income, which is the difference between our interest income on interest-earning assets, such as loans and securities, and our interest expense on interest-bearing liabilities, such as deposits and borrowed funds. Accordingly, our results of operations depend largely on movements in market interest rates and our ability to manage our interest-rate-sensitive assets and liabilities in response to these movements. Factors such as inflation, recession and instability in financial markets, among other factors beyond our control, may affect interest rates.

In response to the COVID-19 outbreak, the Federal Reserve Board has reduced the benchmark fed funds rate to a target range of 0% to 0.25%, and the yields on 10 and 30-year treasury notes have declined to historic lows. Decreases in interest rates can result in increased prepayments of loans and mortgage-related securities, as borrowers refinance to reduce their borrowing costs. Under these circumstances, we are subject to reinvestment risk as we may have to reinvest such loan or securities prepayments into lower-yielding assets, which may also negatively impact our income. Conversely, if interest rates rise, and the interest rates on our deposits increase faster than the interest rates we receive on our loans and investments, our interest rate spread would decrease, which would have a negative effect on our net interest income and profitability. Furthermore, increases in interest rates may adversely affect the ability of borrowers to make loan repayments on adjustable-rate loans, as the interest owed on such loans would increase as interest rates increase.

Any substantial, unexpected or prolonged change in market interest rates could have a material adverse effect on our financial condition, liquidity and results of operations. While we pursue an asset/liability strategy designed to mitigate our risk from changes in interest rates, changes in interest rates can still have a material adverse effect on our financial condition and results of operations. Changes in interest rates also may negatively affect our ability to originate real estate loans, the value of our assets and our ability to realize gains from the sale of our assets, all of which ultimately affect our earnings. Also, our interest rate risk modeling techniques and assumptions cannot fully predict or capture the impact of actual interest rate changes on our balance sheet or projected operating results.

We have a high concentration of loans secured by real estate in our market area, which makes our business highly susceptible to downturns in the local economy and could adversely affect our financial condition and results of operations.

Unlike larger financial institutions that are more geographically diversified, we are a community banking franchise located in central New York. At June 30, 2020, almost all of our mortgage loans were secured by real

estate located in our primary market area in central New York. As a result, we have a greater risk of loan defaults and losses in the event of further economic weakness in our market area, which may have a negative effect on the ability of our borrowers to timely repay their loans. Continued deterioration or stagnation in economic conditions generally and in the market areas we serve could result in the following consequences, any of which could have a material adverse effect on our business, financial condition and results of operations:

- loan delinquencies, problem assets and foreclosures may increase;
- weak economic conditions may limit the demand for loans by creditworthy borrowers, limiting our capacity to leverage our retail deposits and maintain our net interest income; and
- the value of the collateral for our loans may decline.

If our allowance for loan losses is not sufficient to cover actual loan losses, our earnings could decrease.

We maintain an allowance for loan losses, which is established through a provision for loan losses, that represents management's best estimate of probable losses within the existing portfolio of loans. We make various assumptions and judgments about the collectability of our loan portfolio, including the creditworthiness of borrowers and the value of the real estate and other assets serving as collateral for the repayment of loans. In determining the adequacy of the allowance for loan losses, we rely on our experience and our evaluation of economic conditions. If our assumptions prove to be incorrect, our allowance for loan losses may not be sufficient to cover losses inherent in our loan portfolio and adjustment may be necessary to allow for different economic conditions or adverse developments in our loan portfolio. Consequently, a problem with one or more loans could require us to significantly increase the level of our provision for loan losses. In addition, federal regulators periodically review our allowance for loan losses and as a result of such reviews, we may have to adjust our allowance for loan losses or recognize further loan charge-offs. However, regulatory agencies are not directly involved in the process of establishing the allowance for loan losses, as the process is our responsibility and any adjustment of the allowance is the responsibility of management. Material additions to the allowance would materially decrease our net income.

Our results of operations may be adversely affected by other-than-temporary impairment charges relating to our investment portfolio.

We may be required to record future impairment charges on our investment securities if they suffer declines in value that we consider other-thantemporary. Numerous factors, including the lack of liquidity for resales of certain investment securities, the absence of reliable pricing information for investment securities, adverse changes in the business climate, adverse regulatory actions, unanticipated changes in the competitive environment, changes in market interest rates and limited investor demand, could have a negative effect on our investment portfolio in future periods. Significant impairment charges could negatively impact our earnings and regulatory capital ratios.

Our business may be adversely affected by credit risk associated with residential property.

At June 30, 2020, \$216.4 million, or 26.8% of our total loan portfolio, was secured by one- to-four residential family real estate. One- to four-family residential mortgage lending is generally sensitive to regional and local economic conditions that significantly impact the ability of borrowers to meet their loan payment obligations, making loss levels difficult to predict. We have risk that we could incur losses if borrowers default on their loans because we may be unable to recover all or part of the defaulted loans by selling the real estate collateral. In addition, if the borrowers sell their homes, they may be unable to repay their loans in full from the sale proceeds. For these reasons, we may experience higher rates of delinquencies, default and loss on our residential mortgage loans.

The Bank's reliance on brokered deposits could adversely affect its liquidity and operating results.

Among other sources of funds, the Bank relies on brokered deposits to provide funds with which to make loans and provide for other liquidity needs. At June 30, 2020, brokered deposits totaled \$164.6 million, or approximately 17.0% of total deposits. Generally brokered deposits may not be as stable as other types of deposits. Depositors may not replace their brokered deposits when they mature, or we may have to pay a higher rate of interest to keep those deposits or to replace them with other deposits or other sources of funds. Not being able to maintain or replace those deposits as they mature would adversely affect our liquidity. Paying higher deposit rates to maintain or replace brokered deposits would adversely affect our net interest margin and operating results.

Strong competition within our market areas may limit our growth and profitability.

Competition in the banking and financial services industry is intense. In our market areas, we compete with commercial banks, savings institutions, mortgage brokerage firms, credit unions, finance companies, mutual funds, money market funds, insurance companies, and brokerage firms operating locally and elsewhere. Some of our competitors have greater name recognition and market presence and offer certain services that we do not or cannot provide, all of which benefit them in attracting business. In addition, larger competitors may be able to price loans and deposits more aggressively than we do.

Also, technology has lowered barriers to entry and made it possible for non-banks to offer products and services traditionally provided by banks, such as automatic transfer and automatic payment systems. Many of our competitors have fewer regulatory constraints and may have lower cost structures. Additionally, due to their size, many competitors may be able to achieve economies of scale and, as a result, may offer a broader range of products and services than we can as well as better pricing for those products and services.

We depend on our management team to implement our business strategy and execute successful operations and we could be harmed by the loss of their services

We are dependent upon the services of the members of our senior management team who direct our strategy and operations. Members of our senior management team, or lending personnel who have expertise in our markets and key business relationships, would be difficult to replace. The loss of these persons or our inability to hire additional qualified personnel could impact our ability to implement our business strategy and could have a material adverse effect on our results of operations and our ability to compete.

We are a community bank and our ability to maintain our reputation is critical to the success of our business. The failure to do so may adversely affect our performance.

We are a community bank and our reputation is one of the most valuable assets of our business. A key component of our business strategy is to rely on our reputation for customer service and knowledge of local markets to expand our presence by capturing new business opportunities from existing and prospective customers in our market area and contiguous areas. As such, we strive to conduct our business in a manner that enhances our reputation. This is done, in part, by recruiting, hiring and retaining employees who share our core values of being an integral part of the communities we serve, delivering superior service to our customers and caring about our customers. If our reputation is negatively affected by the actions of our employees, by our inability to conduct our operations in a manner that is appealing to current or prospective customers or otherwise, our business and operating results may be materially adversely affected.

The Company is subject to environmental liability risk associated with lending activities.

In the course of our business, we may foreclose and take title to real estate and could be subject to environmental liabilities with respect to these properties. The Company may be held liable to a governmental

entity or to third parties for property damage, personal injury, investigation and clean-up costs incurred by these parties in connection with environmental contamination, or may be required to investigate or clean up hazardous or toxic substances, or chemical releases at a property. Our policies and procedures require environmental factors to be considered during the loan application process. An environmental review is performed before initiating any commercial foreclosure action; however, these reviews may not be sufficient to detect all potential environmental hazards. Possible remediation costs and liabilities could have a material adverse effect on our financial condition.

Changes in laws and regulations and the cost of regulatory compliance with new laws and regulations may adversely affect our operations and/or increase our costs of operations.

We are subject to extensive regulation, supervision and examination by the NYDFS, the FDIC, and the Federal Reserve Board. The Bank is a member of the Federal Home Loan Bank of New York and is also subject to certain regulations by the Federal Home Loan Bank System. Such regulation and supervision govern the activities in which an institution and its holding company may engage and are intended primarily for the protection of federal deposit insurance funds and the depositors and borrowers of the Bank, rather than for the Company's stockholders. Regulatory authorities have extensive discretion in their supervisory and enforcement activities, including the imposition of restrictions on our operations, the classification of our assets and determination of the level of our allowance for loan losses. These regulations, along with existing tax, accounting, securities, insurance and monetary laws, rules, standards, policies, and interpretations control the methods by which financial institutions conduct business, implement strategic initiatives and tax compliance, and govern financial reporting and disclosures. Any change in such regulation and oversight, whether in the form of regulatory policy, regulations, legislation or supervisory action, may have a material impact on our operations. Further, changes in accounting standards can be both difficult to predict and involve judgment and discretion in their interpretation by our and its independent accounting firms. These changes could materially impact, potentially even retroactively, how our reports its financial condition and results of operations.

Non-compliance with the USA PATRIOT Act of 2001, Bank Secrecy Act, or other laws and regulations could result in fines or sanctions.

The USA PATRIOT Act of 2001 and Bank Secrecy Acts require financial institutions to develop programs to prevent financial institutions from being used for money laundering and terrorist activities. If such activities are detected, financial institutions are obligated to file suspicious activity reports with the U.S. Treasury's Office of Financial Crimes Enforcement Network. These rules require financial institutions to establish procedures for identifying and verifying the identity of customers seeking to open new financial accounts. Failure to comply with these regulations could result in fines or sanctions, including restrictions on conducting acquisitions or establishing new branches. The policies and procedures we have adopted that are designed to assist in compliance with these laws and regulations may not be effective in preventing violations of these laws and regulations.

Consumers may decide not to use banks to complete their financial transactions.

The process of eliminating banks as intermediaries, known as "disintermediation," could result in the loss of fee income as well as the loss of customer deposits and the related income generated from those deposits. The loss of these revenue streams could have an adverse effect on our financial condition and results of operations.

Because the nature of the financial services business involves a high volume of transactions, we face significant operational risks.

The financial services market is complex and we rely on the ability of our employees and systems to process a high number of transactions. Operational risk is the risk of loss resulting from our operations, including but not limited to, the risk of fraud by employees or persons outside our company, the execution of unauthorized transactions by employees, errors relating to transaction processing and technology, breaches of the internal

control system and compliance requirements, and business continuation and disaster recovery. Insurance coverage may not be available for such losses, or where available, such losses may exceed insurance limits. This risk of loss also includes the potential legal actions that could arise as a result of an operational deficiency or as a result of noncompliance with applicable regulatory standards, adverse business decisions or their implementation, and customer attrition due to potential negative publicity. In the event of a breakdown in our internal control systems, improper operation of systems or improper employee actions, we could suffer financial loss, face regulatory action, and suffer damage to our reputation.

Risks associated with system failures, interruptions, or breaches of security could negatively affect our earnings.

Information technology systems are critical to our business. We use various technology systems to manage our customer relationships, general ledger, securities investments, deposits and loans. We have established policies and procedures to prevent or limit the effect of system failures, interruptions, and security breaches, but such events may still occur or may not be adequately addressed if they do occur. In addition, any compromise of our systems could deter customers from using our products and services. Although we rely on security systems to provide security and authentication necessary to effect the secure transmission of data, these precautions may not protect our systems from security breaches.

We rely on certain third party providers for a portion of our information technology systems. If these third-party providers encounter difficulties, or if we have difficulty communicating with them, our ability to adequately process and account for transactions could be affected, and our business operations could be adversely affected. Threats to information security also exist in the processing of customer information through various other vendors and their personnel.

The occurrence of any system failures, interruption, or breach of security could damage our reputation and result in a loss of customers and business, thereby subjecting us to additional regulatory scrutiny, or could expose us to litigation and possible financial liability. Any of these events could have a material adverse effect on our financial condition and results of operations.

Our risk management framework may not be effective in mitigating risk and reducing the potential for significant losses.

Our risk management framework is designed to minimize risk and loss to us. We seek to identify, measure, monitor, report and control our exposure to risk, including strategic, market, liquidity, compliance and operational risks. While we use a broad and diversified set of risk monitoring and mitigation techniques, these techniques are inherently limited because they cannot anticipate the existence or future development of currently unanticipated or unknown risks. Accordingly, we could suffer losses as a result of our failure to properly anticipate and manage these risk

Uncertainty surrounding the future of LIBOR (London Interbank Offer Rate) may affect the fair value and return on our financial instruments that use LIBOR as a reference rate.

We hold assets, liabilities, and derivatives that are indexed to the various tenors of LIBOR including but not limited to the one-month LIBOR, three-month LIBOR, one-year LIBOR, and the ten-year constant maturing swap rate. The LIBOR yield curve is also utilized in the fair value calculation of many of these instruments. The reform of major interest benchmarks led to the announcement of the United Kingdom's Financial Conduct Authority, the regulator of the LIBOR index, that LIBOR would not be supported in its current form after the end of 2021. We believe the U.S. financial sector will maintain an orderly and smooth transition to new interest rate benchmarks of which we will evaluate and adopt if appropriate. While in the U.S., the Alternative Rates Committee of the Federal Reserve Board and Federal Reserve Bank of New York have identified the SOFR as an alternative U.S. dollar reference interest rate, it is too early to predict the financial impact this rate index replacement may have, if at all.

Risks Related to the Exchange Offer

If you do not tender your Old Notes, you will continue to hold unregistered Old Notes, and your ability to transfer Old Notes will be adversely affected.

If you do not exchange your Old Notes for New Notes in the exchange offer, you will continue to be subject to the restrictions on transfer of your Old Notes described in the legend on the global certificates for the Old Notes. The restrictions on transfer of the Old Notes arose because we issued the Old Notes in a private placement not subject to registration under the Securities Act or applicable state securities laws. In general, you may only offer or sell the Old Notes if they are registered under the Securities Act and applicable state securities laws, or you offer and sell under an exemption from these requirements. We do not plan to register any sale of the Old Notes under the Securities Act. Additionally, the tender of Old Notes under the exchange offer by other holders will reduce the principal amount of the Old Notes outstanding, which may have an adverse effect upon, and increase the volatility of, the market price of any Old Notes that remain outstanding, due to a reduction in liquidity. See "The Exchange Offer—Consequences of Failure to Exchange."

You may not receive New Notes in the exchange offer if you do not properly follow the exchange offer procedures.

We will issue New Notes in exchange for your Old Notes only if you validly tender and do not validly withdraw your Old Notes before expiration of the exchange offer. Although we intend to request the exchange agent to notify holders of defects or irregularities relating to tenders and withdrawals of Old Notes, neither we, the exchange agent nor any other person will have any duty or incur any liability for failure to give such notification. If you are the beneficial holder of Old Notes that are held through your broker, dealer, commercial bank, trust company or other nominee, and you wish to tender such Old Notes in the exchange offer, you should promptly contact the person through whom your Old Notes are held and instruct that person to tender your Old Notes on your behalf in accordance with the procedures described in this prospectus and the accompanying letter of transmittal. Old Notes that are not tendered or that are tendered but not accepted for exchange will, following consummation of the exchange offer, continue to be subject to the existing transfer restrictions under the Securities Act, and upon consummation of the exchange offer, certain registration and other rights under the registration rights agreement that we entered into with the initial purchasers of the Old Notes will terminate. See "The Exchange Offer—Procedures for Tendering Old Notes" and "The Exchange Offer—Consequences of Failure to Exchange."

Some holders who exchange their Old Notes may be deemed to be underwriters, and these holders will be required to comply with additional requirements under the Securities Act.

Based on interpretations of the Securities Act by the staff of the SEC contained in certain no-action letters issued to other parties, we believe that you, or any other person receiving New Notes, may offer for resale, resell or otherwise transfer the New Notes without complying with the registration and prospectus delivery requirements of the Securities Act. Our belief that transfers of New Notes would be permitted without registration or prospectus delivery under the conditions described above is based on interpretations by the staff of the SEC given to other, unrelated issuers in similar exchange offers. The staff of the SEC has not considered the exchange offer in the context of a no-action letter, and we cannot assure you that the staff of the SEC would make a similar interpretation with respect to the exchange offer. Additionally, in some instances described in this prospectus under "Plan of Distribution," certain holders of New Notes will remain obligated to comply with the registration and prospectus delivery requirements of the Securities Act to resell the New Notes. If any such holder transfers any New Notes without delivering a prospectus meeting the requirements of the Securities Act or without an applicable exemption from registration under the Securities Act, such holder may incur liability under the Securities Act. We do not and will not assume, or indemnify any such holder or other person against, such liability.

Risks Related to the Notes

The notes are unsecured and subordinated to our existing and future senior indebtedness.

Although the New Notes will rank on par with the Old Notes, the notes will be unsecured, subordinated obligations of the Company, and consequently, will rank junior in right of payment to all of our secured and unsecured "senior indebtedness" now existing or that we incur in the future, as described under "Description of the Notes—Subordination." As a result, upon any payment or distribution of assets to creditors in the case of liquidation, dissolution, winding up, reorganization, assignment for the benefit of creditors or any bankruptcy, insolvency or similar proceeding, holders of senior indebtedness will be entitled to have the senior indebtedness paid in full prior to the holders of the notes receiving any payment of principal of, or interest on, the notes.

As of June 30, 2020, the Company and our consolidated subsidiaries had outstanding indebtedness, total deposits and other liabilities of \$1.06 billion, which rank structurally senior to the notes. The notes do not limit the amount of additional indebtedness or senior indebtedness that we or any of our subsidiaries, including the Bank, may incur. Accordingly, in the future, we and our subsidiaries may incur other indebtedness, which may be substantial in amount, including senior indebtedness, indebtedness ranking on par with the notes and indebtedness ranking effectively senior to the notes, as applicable. Any additional indebtedness and liabilities that we and our subsidiaries incur may adversely affect our ability to pay our obligations on the notes.

As a consequence of the subordination of the notes to our existing and future senior indebtedness, an investor in the notes may lose all or some of its investment upon our liquidation, dissolution, winding up, reorganization, assignment for the benefit of creditors or any bankruptcy, insolvency or similar proceeding. In such an event, our assets would be available to pay the principal of, and any accrued and unpaid interest on, the notes only after all of our senior indebtedness had been paid in full. In such an event, any of our other general, unsecured obligations that do not constitute senior indebtedness, depending upon their respective preferences, will share ratably in our remaining assets after we have paid all of our senior indebtedness in full

The notes are obligations only of Pathfinder Bancorp, Inc. and not obligations of the Bank or any of our other subsidiaries and will be effectively subordinated to the existing and future indebtedness, deposits and other liabilities of the Bank and our other subsidiaries.

The notes are obligations solely of Pathfinder Bancorp, Inc. and are not obligations of the Bank or any of our other subsidiaries. The Bank and our other subsidiaries are separate and distinct legal entities from Pathfinder Bancorp, Inc. The rights of Pathfinder Bancorp, Inc. and the rights of its creditors, including the holders of the notes, to participate in any distribution of the assets of the Bank or any other subsidiary (either as a shareholder or as a creditor) upon an insolvency, bankruptcy, liquidation, dissolution, winding up or similar proceeding of the Bank or such other subsidiary (and the consequent right of the holders of the notes to participate in those assets after repayment of our existing or future senior indebtedness), will be subject to the claims of the creditors of the Bank, including depositors of the Bank or such other subsidiary. Accordingly, the notes are effectively subordinated to all of the existing and future indebtedness, deposits and other liabilities of the Bank and our other subsidiaries, to the extent that those liabilities, including deposit liabilities, equal or exceed their respective assets. The notes do not limit the amount of indebtedness or other liabilities that the Bank or any of our other subsidiaries may incur, all of which would rank structurally senior to the notes. Any additional indebtedness and liabilities that our subsidiaries, including the Bank, incur may adversely affect our ability to pay our obligations on the notes.

The notes include limited covenants and do not restrict our ability to incur additional debt.

The notes do not contain any financial covenants that would require us to achieve or maintain any minimum financial results relating to our financial condition, liquidity or results of operations, to meet or exceed certain financial ratios as a general matter or to incur additional indebtedness or obligations or to maintain any reserves.

Moreover, except under certain limited circumstances, the notes do not contain any covenants prohibiting or limiting us or our subsidiaries from granting liens on assets to secure indebtedness or other obligations, repurchasing our stock or other securities, including any of the notes, or paying dividends or make other distributions to our shareholders. The notes do not contain any provision that would provide protection to the holders of the notes against a material decline in our credit quality.

In addition, the notes do not limit the amount of additional indebtedness that we, the Bank or any of our other subsidiaries may incur or the amount of other obligations that we or the Bank may incur ranking senior or equal to the indebtedness evidenced by the notes. The issuance or guarantee of any such securities or the incurrence of any such other liabilities may reduce the amount, if any, recoverable by holders of the notes in the event of our insolvency, bankruptcy, liquidation, dissolution, winding up or similar proceeding and may limit our ability to meet our obligations under the notes.

To service our debt, we will require a significant amount of cash. Our ability to generate cash depends on many factors.

Our ability to make payments on or to refinance our indebtedness, including our ability to meet our obligations under the notes, and to fund our operations depends on our ability to generate cash and our access to the capital markets in the future. These will depend on our financial and operating performance, which, to a certain extent, are subject to general economic, financial, competitive, legislative, regulatory, capital market conditions and other factors that are beyond our control. If our cash flows and capital resources are insufficient to fund our debt service obligations, we may be unable to obtain new financing or to fund our obligations to our customers and business partners, implement our business plans, sell assets, seek additional capital or restructure or refinance our indebtedness, including the notes. As a result, we may be unable to meet our obligations under the notes. In the absence of sufficient capital resources, we could face substantial liquidity problems and might be required to dispose of material assets or operations to meet debt service and other obligations. We may not be able to consummate those dispositions of assets or obtain the proceeds that we could realize from them, and these proceeds may not be adequate to meet any debt service obligations then-due, including obligations under the notes. Additionally, our ability to service our debt is dependent, in part, on the receipt of dividends, fees and interest paid to us by the Bank. The Bank is a separate legal entity that is legally distinct from us and has no obligation to make funds available to us for payments of principal of or interest on the notes. While we expect these payments to continue in the future, there are regulatory limits on the amount of dividends and distributions that the Bank can pay to us without regulatory approval. Accordingly, we can provide no assurance that we will receive dividends or other distributions from the Bank in an amount sufficient to pay the principal of or interest on the notes. See "Superv

Our indebtedness could adversely affect our financial results and prevent us from fulfilling our obligations under the notes.

In addition to our currently outstanding indebtedness, we may be able to borrow substantial additional indebtedness in the future. If new indebtedness is incurred in addition to our current debt levels, the related risks that we now face could increase. Our indebtedness, including the indebtedness we may incur in the future, could have important consequences for the holders of the notes, including:

- limiting our ability to satisfy our obligations with respect to the notes;
- increasing our vulnerability to general adverse economic industry conditions;
- limiting our ability to obtain additional financing to fund future working capital, capital expenditures and other general corporate requirements;
- requiring a substantial portion of our cash flow from operations for the payment of principal of and interest on our indebtedness and thereby reducing our ability to use our cash flow to fund working capital, capital expenditures and general corporate requirements;

- · limiting our flexibility in planning for, or reacting to, changes in our business and the industry; and
- putting us at a disadvantage compared to competitors with less indebtedness.

The notes are subject to limited rights of acceleration.

Payment of principal of the notes may be accelerated only in the case of certain bankruptcy-related events with respect to us. As a result, holders of the notes have no right to accelerate the payment of principal of the notes if we fail to pay principal of or interest on the notes or if we fail to perform any of our other obligations under the notes or in the indenture. See "Description of the Notes—Events of Default; Right of Acceleration; Failure to Pay Principal or Interest."

The amount of interest payable on the notes will vary beginning October 15, 2025, and interest after that date may be less than the initial fixed annual interest rate of 5.50% prior to that date.

The interest rate on the notes will vary beginning October 15, 2025, at a floating rate equal to the Floating Interest Rate (as defined below in "Description of the Note—Determination of Floating Interest Rate"), as determined quarterly on the determination date for the applicable interest period, plus 532 basis points. The interest rate that is determined on the relevant determination date will apply to the entire interest period following such determination date, even if the Floating Interest Rate increases during that interest period. The floating rate may be volatile over time and could be substantially less than the fixed interest rate we will pay before October 15, 2025. As a result, holders of the notes could experience a decline in their receipt of interest and the market price of the notes could decline. We have no control over a number of factors that may affect market interest rates, including geopolitical conditions and economic, financial, political, regulatory, judicial or other events that affect the markets generally and that are important in determining the existence, magnitude and longevity of market interest rate risk.

The notes may be redeemed at our option under certain circumstances, which limits the ability of holders of the notes to accrue interest over the full stated term of the notes.

We may, at our option, redeem the notes (i) in whole or in part on October 15, 2025 and at any time thereafter, and (ii) in whole, but not in part, at any time upon the occurrence of a Tier 2 Capital Event, a Tax Event or an Investment Company Event (each of such terms as defined below in "Description of the Note—Redemption"), in each case, at a redemption price equal to 100% of the principal amount of the notes to be redeemed, plus accrued and unpaid interest to, but excluding, the date of redemption. Any redemption of the notes will be subject to any required regulatory approvals, including from the Federal Reserve Board, to the extent such approval is then required. There can be no assurance that the Federal Reserve Board or any other regulatory agency, as applicable, will approve any redemption of the notes that we may propose. Furthermore, we are under no obligation to redeem any notes when they first become redeemable or on any date thereafter. If we redeem the notes for any reason, you will not have the opportunity to continue to accrue and be paid interest to the stated maturity date, and you may not be able to reinvest the redemption proceeds you receive in a similar security or in securities bearing similar interest rates or yields.

There is not expected to be an active trading market for the New Notes.

The New Notes are a new issue of securities with no established trading market. We do not intend to apply for listing of the New Notes on any national securities exchange or quotation system. A liquid or active trading market for the New Notes is not expected to develop. If an active trading market for the New Notes does not develop, the market price and liquidity of the New Notes may be adversely affected. If the New Notes are traded, they may trade at a discount from their initial offering price, depending on prevailing interest rates, the market for similar securities, our performance and other factors. Accordingly, we cannot assure you that you will be able to sell any New Notes or the prices, if any, at which holders may be able to sell their New Notes.

SOFR has a very limited history, and the future performance of SOFR cannot be predicted based on historical performance.

Beginning on October 15, 2025, the notes will bear interest at an annual floating interest rate, reset quarterly, equal to the Floating Interest Rate determined for the applicable interest period plus 532 basis points. See "Description of the Notes" for additional information. The Floating Interest Rate is expected to be Three-Month Term SOFR (as defined below in "Description of the Note—Determination of Floating Interest Rate"), which rate is subject to numerous uncertainties.

SOFR, or the "secured overnight financing rate," is a broad measure of the cost of borrowing cash overnight collateralized by U.S. Treasury securities. SOFR was first published by the Federal Reserve Bank of New York (the "FRBNY") in April 2018. The FRBNY commenced publication of SOFR as an alternate reference rate for the London Interbank Offered Rate ("LIBOR"), following the announcement by the United Kingdom Financial Conduct Authority of its intention to stop persuading or compelling banks to submit rates for the calculation of LIBOR after 2021.

SOFR has a very limited history, and the future performance of SOFR cannot be predicted based on its limited historical performance. The level of SOFR during the Floating Interest Period (as defined below) of the notes may bear little or no relation to historical actual or historical indicative data. Prior observed patterns, if any, in the behavior of market variables and their relation to SOFR, such as correlations, may change in the future. While some pre-publication historical data have been released by the FRBNY, such analysis inherently involves assumptions, estimates and approximations, and hypothetical or historical performance data are not indicative of, and have no bearing on, the potential performance of SOFR. The future performance of SOFR is therefore impossible to predict, and no future performance of SOFR may be inferred from any of the historical actual or historical indicative data. Changes in the levels of SOFR will affect the interest rate of the notes during the Floating Interest Period and accordingly will affect the return on the notes and the market price of the notes, but it is impossible to predict whether such levels will rise or fall.

SOFR may be more volatile than other benchmark or market rates.

Since the initial publication of SOFR, daily changes in the rate have, on occasion, been more volatile than daily changes in other benchmark or market rates, such as three-month U.S. dollar LIBOR, during corresponding periods, and SOFR may bear little or no relation to the historical actual or historical indicative data. In addition, although changes in Term SOFR and Compounded SOFR (each of such terms as defined below in "Description of the Note— Determination of Floating Interest Rate") generally are not expected to be as volatile as changes in daily levels of SOFR, the return on and value of the notes may fluctuate more than floating rate securities that are linked to less volatile rates.

Any failure of SOFR to gain market acceptance could adversely affect the notes.

SOFR may fail to gain market acceptance. SOFR was developed for use in certain U.S. dollar derivatives and other financial contracts as an alternative to U.S. dollar LIBOR in part because it could be considered a good representation of general funding conditions in the overnight U.S. Treasury repurchase agreement market. However, as a rate based on transactions secured by U.S. Treasury securities, it does not measure bank-specific credit risk and, as a result, is less likely to correlate with the unsecured short-term funding costs of banks. This could mean that market participants may not consider SOFR a suitable substitute or successor for all of the purposes for which LIBOR historically has been used (including, without limitation, as a representation of the unsecured short-term funding costs of banks), which may, in turn, lessen market acceptance of SOFR. Any failure of SOFR to gain market acceptance could adversely affect the return on the notes, the liquidity in any trading market for the notes and the price at which you could sell the notes.

SOFR may be modified or discontinued.

SOFR is a relatively new rate, and the FRBNY, or any successor as administrator of SOFR, may make methodological or other changes that could change the value of SOFR, including changes related to the methodology by which SOFR is calculated, eligibility criteria applicable to the transactions used to calculate SOFR or timing related to the publication of SOFR. If the manner in which SOFR is calculated is changed, that change may result in a reduction of the amount of interest payable on the notes, which may adversely affect the market price of the notes. The administrator of SOFR may withdraw, modify, amend, suspend or discontinue the calculation or dissemination of SOFR in its sole discretion and without notice and has no obligation to consider the interests of holders of the notes in calculating, withdrawing, modifying, amending, suspending or discontinuing SOFR.

The calculation agent will make certain determinations with respect to the notes.

The calculation agent for the notes, which may be us or another entity that we appoint, will make certain determinations with respect to the notes during the Floating Interest Period, including with respect to the determination of the interest rate during this period. These determinations may adversely affect the payout to investors. Moreover, certain determinations may require the exercise of discretion and the making of subjective judgments, which adversely affect the payout to you on the notes.

Changes in our credit ratings may adversely affect your investment in the notes.

The credit ratings on the notes are assessments by rating agencies of our ability to pay our debts when due. These ratings are not recommendations to purchase, hold or sell the notes, inasmuch as the ratings do not comment as to market price or suitability for a particular investor, are limited in scope and do not address all material risks relating to an investment in the notes, but rather reflect only the view of each rating agency at the time the rating is issued. The ratings are based on current information furnished to the ratings agencies by us and information obtained by the ratings agencies from other sources. An explanation of the significance of each rating may be obtained from the issuing rating agency. There can be no assurance that such credit ratings will remain in effect for any given period of time or that such ratings will not be lowered, suspended or withdrawn entirely by the rating agencies, if, in each rating agency's judgment, circumstances so warrant.

Any ratings of our long-term debt are based on a number of factors, including our financial strength as well as factors not entirely within our control, including conditions affecting the financial services industry generally. There can be no assurance that we will not receive adverse changes in our ratings in the future, which could adversely affect the cost and other terms upon which we are able to obtain funding and the way in which we are perceived in the capital markets. Actual or anticipated changes or downgrades in our credit ratings, including any announcement that our ratings are under review for a downgrade, could affect the market value and liquidity of the notes and increase our borrowing costs.

An investment in the notes is not an FDIC insured deposit.

The notes are not savings accounts, deposits or other obligations of the Company, the Bank or any of our other subsidiaries and are not insured or guaranteed by the FDIC or any other governmental agency or instrumentality. Your investment will be subject to investment risk, and you may experience loss with respect to your investment.

USE OF PROCEEDS

The exchange offer is intended to satisfy our obligations under the registration rights agreements that we entered into with the initial purchasers of the Old Notes. We will not receive any cash proceeds from the exchange offer. In consideration for issuing the New Notes as contemplated by this prospectus, we will receive in like principal amount in exchange of the Old Notes. Old Notes that are surrendered in exchange for New Notes will be retired and cancelled and will not be reissued. Accordingly, the issuance of the New Notes under the exchange offer will not result in any increase in our outstanding indebtedness. Subject to certain exceptions, we will pay all expenses incident to the exchange offer.

THE EXCHANGE OFFER

General

In connection with the issuance of the Old Notes on October 14, 2020, we entered into registration rights agreements with the initial purchasers of the Old Notes, which provide for the exchange offer we are making pursuant to this prospectus. The exchange offer will permit eligible holders of Old Notes to exchange their Old Notes for New Notes that are identical in all material respects with the Old Notes, except that:

- the New Notes have been registered with the SEC under the Securities Act and, as a result, will not bear any legend restricting their transfer;
- the New Notes bear a different CUSIP number from the Old Notes;
- the New Notes are generally not subject to transfer restrictions;
- holders of the New Notes are not entitled to registration rights under the registration rights agreement or otherwise; and
- because the New Notes are not entitled to registration rights, holders of the New Notes will not have the right to additional interest under the circumstances described in the registration rights agreements relating to our fulfillment of our registration obligations.

The New Notes will evidence the same debt as the Old Notes. Holders of the New Notes will continue to be entitled to the benefits of the indenture. Accordingly, the New Notes and the Old Notes will be treated as a single series of subordinated debt securities under the indenture. Old Notes that are not accepted for exchange in the exchange offer will remain outstanding and interest on those Old Notes will continue to accrue at the applicable interest rate and be subject to the terms of the applicable indenture.

The exchange offer does not depend on any minimum aggregate principal amount of Old Notes being tendered for exchange.

We intend to conduct the exchange offer in accordance with the provisions of the registration rights agreements, the applicable requirements of the Securities Act and the related rules and regulations of the SEC applicable to transactions of this type.

We will be deemed to have accepted validly tendered Old Notes if and when we have given oral or written notice to the exchange agent of our acceptance of such Old Notes. Subject to the terms and conditions of the exchange offer, delivery of New Notes will be made by the exchange agent after receipt of our notice of acceptance. The exchange agent will act as agent for the holders of Old Notes tendering their Old Notes for the purpose of receiving New Notes from us in exchange for such tendered and accepted Old Notes. The exchange offer is subject to the conditions set forth below under "The Exchange Offer—Conditions." As a result of these conditions (which may be waived by us, in whole or in part, in our absolute discretion), we may not be required to exchange any of the Old Notes. In such case, or if any tendered Old Notes are not accepted for exchange because of an invalid tender, the occurrence of other events described in this prospectus or otherwise, we will return or cause to be returned the Old Notes not exchanged to the tendering holder after the expiration or termination of the exchange offer.

If a holder of Old Notes validly tenders Old Notes in the exchange offer, the tendering holder will not be required to pay us brokerage commissions or fees. In addition, subject to the instructions in the letter of transmittal and certain limited exceptions described in this prospectus and the letter of transmittal, the tendering holder will not be required to pay transfer taxes for the exchange of Old Notes. Subject to certain exceptions described in this prospectus, we will pay all of the expenses in connection with the exchange offer, other than certain applicable taxes. See "The Exchange Offer—Fees and Expenses."

Holders of outstanding Old Notes do not have any appraisal, dissenters' or similar rights in connection with the exchange offer. Outstanding Old Notes that are not tendered, or are tendered but not accepted, in connection with the exchange offer will remain outstanding. See "Risk Factors—Risks Related to the Exchange Offer."

NEITHER WE NOR THE EXCHANGE AGENT ARE MAKING ANY RECOMMENDATION TO THE HOLDERS OF THE OUTSTANDING OLD NOTES AS TO WHETHER TO TENDER OR REFRAIN FROM TENDERING ALL OR ANY PORTION OF THEIR OUTSTANDING OLD NOTES IN THE EXCHANGE OFFER. IN ADDITION, NEITHER WE NOR THE EXCHANGE AGENT HAVE AUTHORIZED ANYONE TO MAKE ANY SUCH RECOMMENDATION. HOLDERS OF THE OUTSTANDING OLD NOTES MUST MAKE THEIR OWN DECISION WHETHER TO TENDER PURSUANT TO THE EXCHANGE OFFER, AND, IF SO, THE AGGREGATE PRINCIPAL AMOUNT OF OUTSTANDING OLD NOTES TO TENDER AFTER READING THIS PROSPECTUS AND THE LETTER OF TRANSMITTAL AND CONSULTING WITH THEIR ADVISERS, IF ANY, BASED ON THEIR FINANCIAL POSITION AND INDIVIDUAL REQUIREMENTS.

Registration Rights Agreements

We issued the Old Notes in a private placement not subject to registration under the Securities Act or applicable state securities laws. In connection with the issuance of the Old Notes, we entered into registration rights agreements with the initial purchasers of the Old Notes, and we are making the exchange offer to comply with our contractual obligations under the registration rights agreements.

The following provides a summary of certain terms of the registration rights agreements. This summary is qualified in its entirety by reference to the form of registration rights agreement, which is incorporated by reference as an exhibit to the registration statement of which this prospectus is a part.

Under the terms of the registration rights agreements, we agreed to register the New Notes and undertake the exchange offer. The exchange offer is intended to satisfy the rights of holders of Old Notes under the registration rights agreements. After the exchange offer is completed, we will have no further obligations, except under the limited circumstances described below, to provide for any exchange or undertake any further registration with respect to the Old Notes.

Under the terms of the registration rights agreements, we agreed, among other things, to use commercially reasonable efforts to:

- file a registration statement with the SEC on or prior to December 13, 2020 with respect to a registered offer to exchange the Registrable Securities (as defined below) for the New Notes;
- cause that registration statement to be declared effective by the SEC no later than February 11, 2021;
- cause that registration statement to remain effective until the closing of the exchange offer;
- commence the exchange offer promptly after the effectiveness of the registration statement and keep the exchange offer open for not less than 20 business days, or longer if required by applicable law, after the date on which notice of the exchange offer is given to the holders of the Old Notes; and
- consummate the exchange offer no later than 45 days after the effective date of that registration statement.

"Registrable Securities" means the Old Notes, but any Old Notes cease to be Registrable Securities when: (i) a registration statement with respect to the Old Notes has been declared effective under the Securities Act and the Old Notes have been disposed of pursuant to such registration statement, (ii) the Old Notes have been sold to the public pursuant to Rule 144 (or any similar provision then in force, but not Rule 144A) under the Securities Act or are eligible to be resold pursuant to Rule 144 without regard to the public information requirements thereunder, (iii) the Old Notes have ceased to be outstanding, or (iv) the Old Notes have been exchanged for New Notes, which have been registered pursuant to an exchange offer registration statement upon consummation of the exchange offer (unless the New Notes referred to in clause (iv) are held by any broker-dealer who holds Registrable Securities acquired for its own account as a result of market-making activities or other trading activities or otherwise are not freely tradable by such participating broker-dealers without any limitations or restrictions under the Securities Act, in which case, such New Notes will be deemed to be Registrable Securities until they are sold to a purchaser in whose hands such New Notes are freely tradeable without any limitations or restrictions under the Securities Act).

We also agreed to issue and exchange New Notes for all Old Notes validly tendered and not validly withdrawn before the expiration of the exchange offer. We are sending this prospectus, together with a letter of transmittal, to all the holders of the Old Notes known to us. For each Old Note validly tendered to us in the exchange offer and not validly withdrawn, the holder will receive a New Note having a principal amount equal to the principal amount of the tendered Old Note. Old Notes may be exchanged, and New Notes will be issued, only in minimum denominations of \$100,000 and any integral multiple of \$1,000 in excess thereof.

We further agreed that, under certain circumstances, we would file a shelf registration statement with the SEC that would allow resales by certain holders of the Old Notes in lieu of such holders participating in the exchange offer.

Eligibility; Transferability

We are making the exchange offer in reliance on interpretations of the Securities Act by the staff of the SEC set forth in several no-action letters issued to other parties. We have not sought or received our own no-action letter from the staff of the SEC with respect to the exchange offer and the related transactions, and there can be no assurance that the staff of the SEC will make a determination in the case of the exchange offer and such transactions that is similar to its determinations in the above mentioned no-action letters. However, based on these existing SEC staff interpretations, we believe that you, or any other person receiving New Notes, may offer for resale, resell or otherwise transfer the New Notes without complying with the registration and prospectus delivery requirements of the Securities Act, provided that:

- you are, or the person receiving the New Notes is, acquiring the New Notes in the ordinary course of business;
- you do not, nor does any such person, have an arrangement or understanding with any person to participate in any distribution (within the meaning of the Securities Act) of the New Notes;
- you are not, nor is any such person, an "affiliate" of ours within the meaning of Rule 405 under the Securities Act;
- you are not, nor is any such person, a broker-dealer registered under the Exchange Act, and you are not engaged in nor is any such person engaged in, and do not intend to engage in, any distribution (within the meaning of the Securities Act) of the New Notes; and
- you are not acting on behalf of any person who could not truthfully make these statements.

To participate in the exchange offer, you must represent as a holder of Old Notes that each of these statements is true.

In addition, in order for broker-dealers registered under the Exchange Act to participate in the exchange offer, each such broker-dealer must also: (i) represent that it is participating in the exchange offer for its own account and is exchanging Old Notes acquired as a result of market-making activities or other trading activities; (ii) confirm that it has not entered into any arrangement or understanding with us or any of our affiliates to distribute the New Notes and (iii) acknowledge that it will deliver a prospectus meeting the requirements of the Securities Act in connection with any resale of the New Notes. The letter of transmittal to be delivered in connection with a tender of the Old Notes states that by so acknowledging and by delivering a prospectus such broker-dealer will not be deemed to admit that it is an "underwriter" within the meaning of the Securities Act. This prospectus, as it may be amended or supplemented from time to time, may be used by a broker-dealer in connection with resale of the New Notes received in exchange for the Old Notes where such Old Notes were acquired by such broker-dealer as a result of market-making activities or other trading activities. We have agreed that, for a period of 180 days following the expiration date of the exchange offer, we will amend or supplement this prospectus to expedite or facilitate the disposition of any New Notes by such broker-dealers.

Any holder of Old Notes (i) who is our affiliate, (ii) who does not acquire the New Notes in the ordinary course of business, (iii) who participates in or intends to participate in the exchange offer for the purpose of, or with a view to, distributing the New Notes or (iv) who is a broker-dealer who purchased the Old Notes directly from us:

- will not be able to rely on the interpretation of the staff of the SEC set forth in the no-action letters described above;
- will not be able to tender Old Notes in the exchange offer; and
- must comply with the registration and prospectus delivery requirements of the Securities Act in connection with any sale or transfer of the New Notes, unless the sale or transfer is made pursuant to an exemption from those requirements.

The exchange offer is not being made to, nor will we accept tenders for exchange from, holders of Old Notes in any jurisdiction in which the exchange offer or the acceptance of the exchange offer would not be in compliance with the securities or blue sky laws of such jurisdiction.

Expiration of the Exchange Offer; Extensions; Amendments

The exchange offer will expire at 5:00 p.m., Eastern time on [expiration date], or at such later date or time to which we may extend the exchange offer. We refer to such date, as it may be extended, as the "expiration date." To extend the exchange offer, we will notify the exchange agent and each registered holder of the Old Notes of any extension before 9:00 a.m., Eastern time on the next business day after the previously scheduled expiration date. During any such extension, all Old Notes previously tendered will remain subject to the exchange offer and may be accepted for exchange by us.

We reserve the right to extend the exchange offer, delay accepting any tendered Old Notes or, if any of the conditions described below under the heading "The Exchange Offer—Conditions" have not been satisfied, to terminate the exchange offer. We also reserve the right to amend the terms of the exchange offer in any manner. We will give oral or written notice of any delay, extension or termination of, or amendment to, the exchange offer to the exchange agent. We will keep the exchange offer open for not less than 20 business days, or longer if required by applicable law, after the date on which notice of the exchange offer is given to holders of the Old Notes.

If we amend the exchange offer in a manner that we consider material, we will disclose that amendment by means of a prospectus supplement, and we will extend the exchange offer so that at least five business days remain in the exchange offer following notice of the material change.

If we determine to make a public announcement of any delay, extension, amendment or termination of the exchange offer, we will do so by making a timely release through an appropriate news agency.

If we terminate or withdraw the exchange offer, we will promptly pay the consideration offered, or return any Old Notes deposited, under the exchange offer as required by Rule 14e-1(c) under the Exchange Act.

Conditions

The exchange offer is not conditioned on any minimum aggregate principal amount of Old Notes being tendered or accepted for exchange. Notwithstanding any other term of the exchange offer, we will not be required to accept for exchange, or issue any New Notes for, any Old Notes and may terminate or amend the exchange offer before the acceptance of the Old Notes, if:

- such Old Notes are tendered to us other than in accordance with the terms and conditions of the exchange offer;
- we determine that the exchange offer, or the making of any exchange by a holder, violates any applicable law or any applicable interpretation by the staff of the SEC; or
- any action or proceeding is instituted or threatened in any court or by or before any governmental agency with respect to the exchange offer which, in our judgment, would reasonably be expected to impair our ability to proceed with the exchange offer.

The conditions listed above are for our sole benefit and may be asserted by us regardless of the circumstances giving rise to any of these conditions. We reserve the absolute right to waive these conditions in whole or in part at any time and from time to time in our sole discretion prior to the expiration date, subject to applicable law. Our failure at any time to exercise any of the above rights will not be considered a waiver of that right, and that right will be considered an ongoing right which we may assert at any time and from time to time.

In addition, we will not accept for exchange any Old Notes tendered, and no New Notes will be issued in exchange for those Old Notes, if at any time any stop order is threatened or issued by the SEC with respect to the registration statement for the exchange offer and the New Notes or the qualification of the indenture under the Trust Indenture Act of 1939, as amended, or the Trust Indenture Act. In any such event, we must use our commercially reasonable efforts to obtain the withdrawal of any such stop order as soon as practicable and provide prompt notice to each holder of the withdrawal of any such stop order.

Further, we will not be obligated to accept for exchange the Old Notes of any holder that has not made to us the representations described under "The Exchange Offer—Eligibility; Transferability" and "Plan of Distribution."

Procedures for Tendering Old Notes

To participate in the exchange offer, you must validly tender your Old Notes to the exchange agent as described below. It is your responsibility to validly tender your Old Notes.

If you have any questions or need help in exchanging your Old Notes, please contact the exchange agent, whose address, phone number and email address are set forth below in "The Exchange Offer—Exchange Agent."

All of the Old Notes were issued in book-entry form, and all of the Old Notes are currently represented by global certificates held for the account of DTC. Accordingly, DTC, as depositary, or its nominee is treated as the registered holder of the Old Notes and will be the only entity that can tender your Old Notes for New Notes. Therefore, to validly tender Old Notes and to obtain New Notes, you must comply with the procedures described below to initiate the exchange agent's book-entry transfer of the Old Notes into the exchange agent's account at DTC using DTC's ATOP procedures. To comply with those procedures, you must cause:

• a properly transmitted "agent's message" (as defined below) to be received by the exchange agent through ATOP prior to 5:00 p.m., Eastern time, on the expiration date; and

• a timely confirmation of a book-entry tender of the Old Notes into the exchange agent's account at DTC through ATOP pursuant to the procedure for book-entry transfer described below to be received by the exchange agent prior to 5:00 p.m., Eastern time on the expiration date.

Following receipt of a properly transmitted "agent's message," the exchange agent will establish an ATOP account with DTC for purposes of the exchange offer promptly after the commencement of the exchange offer. Any financial institution that is a DTC participant, including your broker or bank, may make a book-entry tender of outstanding Old Notes by causing the book-entry transfer of such Old Notes into the exchange agent's ATOP account in accordance with DTC's procedures for such transfers. In connection with the transfer, the exchange agent must receive a properly transmitted "agent's message," as well as a timely confirmation of a book-entry tender of the Old Notes into its account at DTC through ATOP, prior to 5:00 p.m., Eastern time, on the expiration date. Subject to the terms of the exchange offer, following the expiration or termination of the exchange offer, the exchange agent will exchange Old Notes validly tendered and not validly withdrawn prior to such expiration or termination for an equal principal amount of New Notes by credit to the holder's account at DTC. If the entire principal amount of all Old Notes held by a holder is not tendered, then Old Notes for the principal amount of the Old Notes not tendered and accepted will be returned by credit to the holder's account at DTC following the expiration date.

The term "agent's message" means a message transmitted by a DTC participant to DTC, and thereafter transmitted by DTC to the exchange agent, which states that DTC has received an express acknowledgement from the participant stating that such participant and beneficial holder agree to be bound by the terms of the exchange offer, including the letter of transmittal, and that such agreement may be enforced against such participant.

Each agent's message must include the following information:

- name of the beneficial owner tendering such Old Notes;
- · account number of the beneficial owner tendering such Old Notes;
- principal amount of Old Notes tendered by such beneficial owner; and
- a confirmation that the beneficial owner of the Old Notes has agreed to be bound by the terms of the accompanying letter of transmittal.

The delivery of the Old Notes through DTC, and any transmission of an agent's message through ATOP, is at the election and risk of the person tendering Old Notes. If we do not accept any tendered Old Notes for exchange or if Old Notes are submitted for a greater principal amount than the holder desires to exchange, the unaccepted or non-exchanged Old Notes will be returned, without expense, to their tendering holder by crediting the holder's account at DTC, following the expiration or termination of the exchange offer.

The tender by a holder of Old Notes that is not validly withdrawn prior to the expiration date of the exchange offer and that is accepted by us will constitute a binding agreement between us and the holder in accordance with the terms and subject to the conditions set forth in this prospectus and in the accompanying letter of transmittal. By using the ATOP procedures to exchange Old Notes, you will not be required to deliver a letter of transmittal to the exchange agent. However, by using the ATOP procedures to tender and exchange Old Notes, you will be bound by the terms of the letter of transmittal, and you will be deemed to have made the acknowledgements and the representations and warranties it contains, just as if you had signed it. Each tendering holder, by delivery of an agent's message, waives any right to receive any notice of the acceptance of such tender.

There is no procedure for guaranteed late delivery of the Old Notes in connection with the exchange offer.

We will determine all questions as to the validity, form, eligibility (including time of receipt), acceptance and withdrawal of tendered Old Notes in our sole discretion, and our determination will be final and binding on

all parties. We reserve the absolute right, in our sole and absolute discretion, to reject any and all Old Notes not validly tendered or any Old Notes whose acceptance by us would, in the opinion of our counsel, be unlawful. We also reserve the absolute right, in our sole discretion subject to applicable law, to waive or amend any of the conditions of the exchange offer or to waive any defects, irregularities or conditions of tender as to any particular Old Notes, either before or after the expiration date. Our interpretation of the terms and conditions of the exchange offer (including the instructions in the accompanying letter of transmittal) will be final and binding on all parties. No alternative, conditional or contingent tenders will be accepted. Unless waived, any defects or irregularities in connection with tenders of Old Notes must be cured within a time period we will reasonably determine. We are not required to waive defects and are not required to notify you of defects in your tender. Although we intend to request the exchange agent to notify holders of defects or irregularities relating to tenders and withdrawals of Old Notes, neither we, the exchange agent nor any other person will have any duty or incur any liability for failure to give such notification. Tenders of Old Notes will not be considered to have been made until such defects or irregularities have been cured or waived. If we waive any terms or conditions with respect to a noteholder, we will extend the same waiver to all noteholders with respect to that term or condition. Any Old Notes received by the exchange agent that are not validly tendered and as to which the defects or irregularities have not been cured or waived will be returned by the exchange agent, without expense, to the tendering holders following the expiration date. Each tendering holder, by delivery of an agent's message, waives any right to receive any notice of the acceptance of such tender.

Representations

By tendering Old Notes, each holder is deemed to have represented to us all of the representations contained in the letter of transmittal, including that:

- any New Notes that you receive will be acquired in the ordinary course of business;
- you are not participating in the exchange offer with a view to distribute any New Notes nor do you have any arrangement or understanding with any person to participate in the distribution (within the meaning of the Securities Act) of the New Notes in violation of the provisions of the Securities Act;
- · you are not an "affiliate" (within the meaning of Rule 405 under the Securities Act) of us; and
- if you are a broker-dealer that will receive New Notes for your own account in exchange for Old Notes, you acquired those New Notes as a result of market-making or other trading activities, and you will satisfy any applicable prospectus delivery requirements in connection with any resale of such New Notes.

Withdrawal of Tenders

Except as otherwise provided in this prospectus, you may validly withdraw your tender of Old Notes at any time prior to 5:00 p.m., Eastern time, on the expiration date. For a withdrawal of tendered Old Notes to be effective, the exchange agent must receive, prior to 5:00 p.m., Eastern time on the expiration date, a computer-generated notice of withdrawal, transmitted by DTC on your behalf in accordance with the appropriate procedures of DTC's ATOP system prior to 5:00 p.m., Eastern time, on the expiration date. Any such notice of withdrawal must:

- specify the name of the tendering holder of Old Notes to be withdrawn;
- specify the principal amount of the Old Notes delivered for exchange;
- specify the name and number of the account at DTC to be credited with the withdrawn Old Notes;
- include a statement that such holder is withdrawing its election to have such Old Notes exchanged; and
- otherwise comply with the procedures of DTC.

We will determine all questions as to the validity, form and eligibility (including time of receipt) of such withdrawal notices in our sole discretion, and our determination will be final and binding on all parties. Any Old

Notes validly withdrawn will be considered not to have been validly tendered for purposes of the exchange offer, and no New Notes will be issued in exchange for such Old Notes. Any Old Notes which have been tendered but which are not accepted for exchange or which are withdrawn will be returned to the holder, without expense to such holder, after withdrawal, rejection of tender or termination of the exchange offer. Validly withdrawn Old Notes may be re-tendered by following one of the procedures described above under "—Procedures for Tendering" at any time prior to the expiration date of the exchange offer.

Exchange Agent

UMB Bank, N.A., the trustee under the indenture, has been appointed the exchange agent for the exchange offer. Letters of transmittal and all correspondence in connection with the exchange offer should be sent or delivered by each holder of Old Notes, or a beneficial owner's commercial bank, broker, dealer, trust company or other nominee, to the exchange agent as follows:

By Hand, Overnight Delivery or Mail (Registered or Certified Mail Recommended):

UMB Bank, N.A. Attn: Corporate Trust Officer/Mauri J. Cowen 5555 San Felipe St., Suite 870 Houston, Texas 77056

For additional information, you may contact the exchange agent by calling (713) 300-0587 or emailing Mauri.Cowen@umb.com.

We will pay the exchange agent reasonable and customary fees for its services (including attorneys' fees) and will reimburse it for its reasonable out-of-pocket expenses in connection with the exchange offer.

Fees and Expenses

We will bear the expenses of soliciting tenders of the Old Notes and issuance of the New Notes. The principal solicitation is being made through ATOP. However, we may make additional solicitations by email, telephone or in person by our officers and employees and those of our affiliates.

We have not retained any dealer-manager in connection with the exchange offer and will not make any payments to broker-dealers or others soliciting acceptances of the exchange offer. As indicated above, we will, however, pay the exchange agent reasonable and customary fees for its services and reimburse it for its related reasonable out-of-pocket expenses. We will also pay any other cash expenses that we incur in connection with the exchange offer.

Except as described below, we will pay all transfer taxes, if any, applicable to the exchange of Old Notes under the exchange offer. The tendering holder will be required to pay any transfer taxes, whether imposed on the registered holder or any other person, if:

- New Notes and/or substitute Old Notes not exchanged are to be delivered to, or registered or issued in the name of, any person other than
 the registered holder of the Old Notes so exchanged;
- tendered Old Notes are registered in the name of any person other than the person signing the letter of transmittal; or
- a transfer tax is imposed for any reason other than the exchange of Old Notes under the exchange offer.

If satisfactory evidence of payment of transfer taxes is not submitted with the letter of transmittal, the amount of any transfer taxes will be billed to the tendering holder.

Accounting Treatment

We will record the New Notes at the same carrying value as the Old Notes reflected in our accounting records on the date of the exchange. Accordingly, we will not recognize any gain or loss for accounting purposes upon completion of the exchange offer.

Consequences of Failure to Exchange

Old Notes that are not exchanged will remain "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act and will be subject to the restrictions on transfer described in the Old Notes.

Accordingly, such Old Notes may not be offered, sold, pledged or otherwise transferred except:

- to us or to any of our subsidiaries;
- under a registration statement that has been declared effective under the Securities Act;
- for so long as the Old Notes are eligible for resale pursuant to Rule 144A under the Securities Act, to a person the holder of the Old Notes and any person acting on its behalf reasonably believes is a "qualified institutional buyer" as defined in Rule 144A, that purchases for its own account or for the account of another qualified institutional buyer, in each case, to whom notice is given that the transfer is being made in reliance on Rule 144A; or
- under any other available exemption from the registration requirements of the Securities Act (in which case we and the trustee shall have the right to require the delivery of an opinion of counsel (at the holder's sole cost), certifications and/or other information satisfactory to us and the trustee);

in each case, subject to compliance with any applicable foreign, state or other securities laws.

Upon completion of the exchange offer, due to the restrictions on transfer of the Old Notes and the absence of such restrictions applicable to the New Notes, it is likely that the market, if any, for Old Notes will be relatively less liquid than the market for New Notes. Consequently, holders of Old Notes who do not participate in the exchange offer could experience significant diminution in the value of their Old Notes, compared to the value of the New Notes. The holders of Old Notes not tendered will have no further registration rights, except that, under limited circumstances specified in the registration rights agreement, we may be required to file a shelf registration statement covering resales of Old Notes.

Additional Information Regarding the Registration Rights Agreements

As noted above, we are effecting the exchange offer to comply with our contractual obligations under the registration rights agreements. The registration rights agreements require us to cause an exchange offer registration statement to be filed with the SEC under the Securities Act, use our commercially reasonable efforts to cause the registration statement to become effective, and satisfy certain other obligations, within certain time periods.

In the event that:

- the registration statement is not filed with the SEC on or prior to December 13, 2020;
- the registration statement is not declared effective by the SEC on or prior to February 11, 2021; or
- the exchange offer is not completed on or prior to the 45th day following the effective date of the registration statement;

the interest rate on the Old Notes will be increased by 0.25% per annum immediately following the date of such registration default and will increase by an additional 0.25% per annum immediately following each 90-day

period during which additional interest accrues, but in no event will such increase exceed 0.50% per annum. If at any time more than one registration default has occurred and is continuing, the increase in interest rate will apply as if there occurred a single registration default that begins on the date that the earliest such registration default occurred and ends on such date that there is no registration default. Following the cure of all such registration defaults, the accrual of additional interest will cease and the interest rate will be reduced to the original interest rate borne by the Old Notes.

Our obligation to register the New Notes will terminate upon completion of the exchange offer. However, under certain limited circumstances specified in the registration rights agreements, we may be required to file a shelf registration statement covering resales of the Old Notes.

DESCRIPTION OF THE NOTES

On October 14, 2020, we issued \$25.0 million in aggregate principal amount of our 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030, which we refer to in this prospectus as the "Old Notes." The Old Notes were issued in a private placement transaction to certain qualified institutional buyers and accredited investors, and as such, were not registered under the Securities Act. The Old Notes were issued under an indenture for the 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030, dated October 14, 2020, between Pathfinder Bancorp, Inc., as issuer, and UMB Bank, N.A., as trustee, which we refer to as the "indenture." The term "notes" refers collectively to the Old Notes and the New Notes.

The New Notes will be issued under the indenture and will evidence the same debt as the Old Notes. The terms of the New Notes are identical in all material respects to those of the Old Notes, except that:

- the New Notes have been registered with the SEC under the Securities Act and, as a result, will not bear any legend restricting their transfer;
- the New Notes bear a different CUSIP number from the Old Notes;
- the New Notes are generally not subject to transfer restrictions;
- holders of the New Notes are not entitled to registration rights under the registration rights agreements that we entered into with the initial purchasers of the Old Notes or otherwise; and
- because holders of New Notes are not entitled to registration rights, holders of the New Notes will not have the right to additional interest under the circumstances described in the registration rights agreements relating to our fulfillment of our registration obligations.

The New Notes will be issued only in registered form without coupons and in minimum denominations of \$100,000 and any integral multiple of \$1,000 in excess thereof. The New Notes will be evidenced by a global note deposited with the trustee for the New Notes, as custodian for DTC and transfers of beneficial interests will be facilitated only through records maintained by DTC and its participants.

The terms of the New Notes include those stated in the indenture and those made part of the indenture by reference to the Trust Indenture Act.

The following provides a summary of certain terms of the indenture and the New Notes. This summary is qualified in its entirety by reference to the complete indenture, which is incorporated by reference as an exhibit to the registration statement of which this prospectus is a part, and to the form of notes, which is included as an exhibit to the registration statement of which this prospectus is a part. We urge you to read the indenture and the form of notes because those documents, not this summary description, define your rights as holders of the New Notes. Whenever we refer to the defined terms of the indenture in this prospectus without defining them, the terms have the meanings given to them in the indenture. You must look to the indenture for the most complete description of the information summarized in this prospectus.

Unless otherwise indicated or the context otherwise requires, as used in this section, "we," "our," "us" and the "Company" refer only to Pathfinder Bancorp, Inc. and not to any of its subsidiaries.

General

The exchange offer for the New Notes will be for up to \$25.0 million in aggregate principal amount of the Old Notes. The New Notes, together with any Old Notes that remain outstanding after the exchange offer, will be treated as a single class for all purposes of the indenture, including, without limitation, waivers, consents, amendments, redemptions and offers to purchase.

Principal, Maturity and Interest

The New Notes have materially identical interest terms as the Old Notes, except with respect to additional interest that may be earned on the Old Notes under circumstances relating to our registration obligations under the registration rights agreement. Interest on the notes will accrue from and including October 14, 2020. The notes will mature and become payable, unless earlier redeemed, on October 15, 2030.

From and including October 14, 2020 to but excluding October 15, 2025 or any earlier redemption date, the New Notes will bear interest at a fixed annual rate equal to 5.50%, payable semi-annually in arrears on April 15 and October 15 of each year, beginning April 15, 2021. During this period, interest will be computed on the basis of a 360-day year consisting of twelve 30-day months. Interest on each New Note will accrue from the last interest payment date on which interest was paid on the Old Note surrendered in exchange thereof, or, if no interest has been paid on such Old Note, from the date of its original issuance. Interest on the Old Notes accepted for exchange will cease to accrue upon the issuance of the New Notes.

From and including October 15, 2025 to but excluding the stated maturity or any earlier redemption date, the New Notes will bear interest at an annual floating rate, reset quarterly, equal to the Floating Interest Rate (as defined below) determined on the Floating Interest Determination Date (as defined below) of the applicable Floating Interest Period (as defined below) (provided that in the event that the Floating Interest Rate for the applicable Floating Interest Period is less than zero, the Floating Interest Rate for such Floating Interest Period will be deemed to be zero), plus 532 basis points, payable quarterly in arrears on January 15, April 15, July 15 and October 15 of each year. During this period, interest will be computed on the basis of a 360-day year and the actual number of days elapsed.

We will make each interest payment to the holders of record of the notes at the close of business on the fifteenth calendar day prior to the applicable interest payment date, without regard to whether such day is a business day. Principal of and interest on the notes will be payable, and the notes will be exchangeable and transferable at the office or agency that we have designated and maintain for such purposes, which, initially, will be the corporate trust office of the trustee located at UMB Bank, N.A., 5555 San Felipe St., Suite 870, Houston, Texas, 77056, Attention: Corporate Trust Officer/Mauri Cowen; except that payment of interest may be made at our option by mailing a check to the address of the person entitled thereto as shown on the security register or by transfer to an account maintained by the payee with a bank located in the United States.

Determination of Floating Interest Rate

For the purpose of calculating the interest rate on the notes during the Floating Interest Period, the term "Floating Interest Rate" means initially, Three-Month Term SOFR (as defined below), subject to certain exceptions. In particular, if the Calculation Agent (as defined below) determines prior to the relevant Floating Interest Determination Date (as defined below) that a Benchmark Transition Event and its related Benchmark Replacement Date (each of such terms as defined below) have occurred with respect to Three-Month Term SOFR prior to the Reference Time (as defined below) regarding any determination of the Benchmark (as defined below) on any date, then we will promptly provide notice of such determination to the holders of the notes, and the following terms will thereafter apply to all determinations, calculations and quotations made or obtained for the purposes of calculating the Floating Interest Rate payable on the notes during a relevant Floating Interest Period:

- the Benchmark Replacement will replace the then-current Benchmark (each of such terms as defined below) for all purposes relating to the notes during the relevant Floating Interest Period regarding such determination on such date and all determinations on all subsequent dates;
- in connection with the implementation of a Benchmark Replacement, we will have, from time to time, the right to make Benchmark Replacement Conforming Changes (as defined below);
- any determination, decision or election that may be made by us or by the Calculation Agent pursuant to the benchmark transition provisions set forth in the indenture, including any determination with respect

to a tenor, rate or adjustment or of the occurrence or non-occurrence of an event, circumstance or date, and any decision to take or refrain from taking any action or any selection:

- o will be conclusive and binding absent manifest error;
- o if made by us, will be made in our sole discretion;
- o if made by the Calculation Agent, will be made after consultation with us, and the Calculation Agent will not make any such determination, decision or election to which we reasonably object; and
- o notwithstanding anything to the contrary in the notes, indenture or the applicable subordinated note purchase agreement with the initial purchasers of the Old Notes, will become effective without consent from the relevant holder of such note or any other party; and
- for the avoidance of doubt, after a Benchmark Transition Event and its related Benchmark Replacement Date have occurred, interest payable on the notes for the Floating Interest Period will be an annual rate equal to the sum of the applicable Benchmark Replacement and the interest rate spread described in the indenture.

However, if the Calculation Agent determines that a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to Three-Month Term SOFR, but for any reason the Benchmark Replacement has not been determined as of the relevant Floating Interest Determination Date, the Floating Interest Rate for the applicable Floating Interest Period will be equal to the Floating Interest Rate on the last Floating Interest Determination Date for the notes, as determined by the Calculation Agent.

In addition, if the then-current Benchmark is Three-Month Term SOFR and any of the foregoing provisions concerning the calculation of the interest rate and the payment of interest during the Floating Interest Period are inconsistent with any of the Three-Month Term SOFR Conventions (as defined below) determined by us, then the relevant Three-Month Term SOFR Conventions will apply.

The following definitions apply with respect to the notes, and the foregoing discussion of the determination of the Floating Interest Rate:

- 1. "Benchmark" means, initially, Three-Month Term SOFR; provided that if a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to Three-Month Term SOFR or the then-current Benchmark, then "Benchmark" means the applicable Benchmark Replacement.
- 2. "Benchmark Replacement" means the Interpolated Benchmark (as defined below) with respect to the then-current Benchmark, plus the Benchmark Replacement Adjustment (as defined below) for such Benchmark; provided that if (a) the Calculation Agent cannot determine the Interpolated Benchmark as of the Benchmark Replacement Date or (b) the then-current Benchmark is Three-Month Term SOFR and a Benchmark Transition Event and its related Benchmark Replacement Date have occurred with respect to Three-Month Term SOFR (in which event no Interpolated Benchmark with respect to Three-Month Term SOFR shall be determined), then "Benchmark Replacement" means the first alternative set forth in the order below that can be determined by the Calculation Agent, as of the Benchmark Replacement Date:
 - a. the sum of (i) Compounded SOFR (as defined below) and (ii) the Benchmark Replacement Adjustment;
 - b. the sum of: (i) the alternate rate of interest that has been selected or recommended by the Relevant Governmental Body (as defined below) as the replacement for the then-current Benchmark for the applicable Corresponding Tenor (as defined below) and (ii) the Benchmark Replacement Adjustment;

- c. the sum of: (i) the ISDA Fallback Rate (as defined below) and (ii) the Benchmark Replacement Adjustment;
- d. the sum of: (i) the alternate rate of interest that has been selected by us as the replacement for the then-current Benchmark for the applicable Corresponding Tenor giving due consideration to any industry-accepted rate of interest as a replacement for the then-current Benchmark for U.S. dollar denominated floating rate notes at such time and (ii) the Benchmark Replacement Adjustment.
- 3. "Benchmark Replacement Adjustment" means the first alternative set forth in the order below that can be determined by the Calculation Agent, as of the Benchmark Replacement Date:
 - a. the spread adjustment, or method for calculating or determining such spread adjustment (which may be a positive or negative value or zero) that has been selected or recommended by the Relevant Governmental Body for the applicable Unadjusted Benchmark Replacement (as defined below);
 - b. if the applicable Unadjusted Benchmark Replacement is equivalent to the ISDA Fallback Rate, then the ISDA Fallback Adjustment; or
 - c. the spread adjustment (which may be a positive or negative value or zero) that has been selected by us giving due consideration to any industry-accepted spread adjustment, or method for calculating or determining such spread adjustment, for the replacement of the then-current Benchmark with the applicable Unadjusted Benchmark Replacement for U.S. dollar denominated floating rate notes at such time.
- 4. "Benchmark Replacement Conforming Changes" means, with respect to any Benchmark Replacement, any technical, administrative or operational changes (including changes to the definition of "Floating Interest Period," timing and frequency of determining rates with respect to each Floating Interest Period and making payments of interest, rounding of amounts or tenors and other administrative matters) that we decide may be appropriate to reflect the adoption of such Benchmark Replacement in a manner substantially consistent with market practice (or if we decide that adoption of any portion of such market practice is not administratively feasible or if we determine that no market practice for use of the Benchmark Replacement exists, in such other manner as we determine is reasonably necessary).
- 5. "Benchmark Replacement Date" means the earliest to occur of the following events with respect to the then-current Benchmark:
 - a. in the case of clause (a) of the definition of "Benchmark Transition Event," the relevant Reference Time (as defined below) in respect of any determination;
 - b. in the case of clause (b) or (c) of the definition of "Benchmark Transition Event," the later of (i) the date of the public statement or publication of information referenced therein and (ii) the date on which the administrator of the Benchmark permanently or indefinitely ceases to provide the Benchmark; or
 - c. in the case of clause (d) of the definition of "Benchmark Transition Event," the date of such public statement or publication of information referenced therein.

For the avoidance of doubt, if the event giving rise to the Benchmark Replacement Date occurs on the same day as, but earlier than, the Reference Time in respect of any determination, the Benchmark Replacement Date will be deemed to have occurred prior to the Reference Time for purposes of such determination.

- 6. "Benchmark Transition Event" means the occurrence of one or more of the following events with respect to the then-current Benchmark:
 - a. if the Benchmark is Three-Month Term SOFR, (i) the Relevant Governmental Body has not selected or recommended a forward-looking term rate for a tenor of three months based on SOFR

- (as defined below), (ii) the development of a forward-looking term rate for a tenor of three months based on SOFR that has been recommended or selected by the Relevant Governmental Body is not complete or (iii) we determine that the use of a forward-looking rate for a tenor of three months based on SOFR is not administratively feasible;
- b. a public statement or publication of information by or on behalf of the administrator of the Benchmark announcing that such administrator has ceased or will cease to provide the Benchmark, permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark;
- c. a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark, the central bank for the currency of the Benchmark, an insolvency official with jurisdiction over the administrator for the Benchmark, a resolution authority with jurisdiction over the administrator for the Benchmark or a court or an entity with similar insolvency or resolution authority over the administrator for the Benchmark, which states that the administrator of the Benchmark has ceased or will cease to provide the Benchmark permanently or indefinitely, provided that, at the time of such statement or publication, there is no successor administrator that will continue to provide the Benchmark; or
- d. a public statement or publication of information by the regulatory supervisor for the administrator of the Benchmark announcing that the Benchmark is no longer representative.
- 7. "Calculation Agent" means such bank or other entity (which may be us or an affiliate of ours) as may be appointed by us to act as Calculation Agent for the notes during the Floating Interest Period.
- 8. "Compounded SOFR" means the compounded average of SOFRs for the applicable Corresponding Tenor (as defined below), with the rate, or methodology for this rate, and conventions for this rate being established by us in accordance with:
 - a. the rate, or methodology for this rate, and conventions for this rate selected or recommended by the Relevant Governmental Body for determining compounded SOFR; provided that:
 - b. if, and to the extent that, we or our designee determine that Compounded SOFR cannot be determined in accordance with clause (a) above, then the rate, or methodology for this rate, and conventions for this rate that have been selected by us or our designee giving due consideration to any industry-accepted market practice for U.S. dollar denominated floating rate notes at such time.

For the avoidance of doubt, the calculation of Compounded SOFR will exclude the Benchmark Replacement Adjustment.

- 9. "Corresponding Tenor" with respect to a Benchmark Replacement means a tenor (including overnight) having approximately the same length (disregarding business day adjustment) as the applicable tenor for the then-current Benchmark.
- 10. "Floating Interest Determination Date" means the date upon which the Floating Interest Rate is determined by the Calculation Agent pursuant to the Three-Month Term SOFR Conventions.
- 11. "Floating Interest Period" means each three-month period of each year, beginning October 15, 2025, to but excluding the Stated Maturity or any earlier redemption date.
- 12. "FRBNY" means the Federal Reserve Bank of New York.
- 13. "FRBNY's Website" means the website of the FRBNY at http://www.newyorkfed.org, or any successor source.
- 14. "Interpolated Benchmark" with respect to the Benchmark means the rate determined for the Corresponding Tenor by interpolating on a linear basis between: (a) the Benchmark for the longest period (for which the Benchmark is available) that is shorter than the Corresponding Tenor and (b) the Benchmark for the shortest period (for which the Benchmark is available) that is longer than the Corresponding Tenor.

- 15. "ISDA" means the International Swaps and Derivatives Association, Inc. or any successor thereto.
- 16. "ISDA Definitions" means the 2006 ISDA Definitions published by the ISDA or any successor thereto, as amended or supplemented from time to time, or any successor definitional booklet for interest rate derivatives published from time to time.
- 17. "ISDA Fallback Adjustment" means the spread adjustment (which may be a positive or negative value or zero) that would apply for derivatives transactions referencing the ISDA Definitions to be determined upon the occurrence of an index cessation event with respect to the Benchmark for the applicable tenor.
- 18. "ISDA Fallback Rate" means the rate that would apply for derivatives transactions referencing the ISDA Definitions to be effective upon the occurrence of an index cessation date with respect to the Benchmark for the applicable tenor excluding the applicable ISDA Fallback Adjustment.
- 19. "Reference Time," with respect to any determination of a Benchmark, means (a) if the Benchmark is Three-Month Term SOFR, the time determined by the Calculation Agent after giving effect to the Three-Month Term SOFR Conventions, and (b) if the Benchmark is not Three-Month Term SOFR, the time determined by the Calculation Agent after giving effect to the Benchmark Replacement Conforming Changes.
- 20. "Relevant Governmental Body" means the Federal Reserve and/or the FRBNY, or a committee officially endorsed or convened by the Federal Reserve and/or the FRBNY or any successor thereto.
- 21. "SOFR" means the daily Secured Overnight Financing Rate provided by the FRBNY, as the administrator of the benchmark (or a successor administrator), on the FRBNY's Website.
- 22. "Stated Maturity" means October 15, 2030.
- 23. "Term SOFR" means the forward-looking term rate for the Corresponding Tenor based on SOFR that has been selected or recommended by the Relevant Governmental Body.
- 24. "Term SOFR Administrator" means any entity designated by the Relevant Governmental Body as the administrator of Term SOFR (or a successor administrator).
- 25. "Three-Month Term SOFR" means the rate for Term SOFR for a tenor of three months that is published by the Term SOFR Administrator at the Reference Time for any Floating Interest Period, as determined by the Calculation Agent after giving effect to the Three-Month Term SOFR Conventions.
- 26. "Three-Month Term SOFR Conventions" means any determination, decision or election with respect to any technical, administrative or operational matter (including with respect to the manner and timing of the publication of Three-Month Term SOFR or changes to the definition of "Floating Interest Period," timing and frequency of determining Three-Month Term SOFR with respect to each Floating Interest Period and making payments of interest, rounding of amounts or tenors and other administrative matters) that we decide may be appropriate to reflect the use of Three-Month Term SOFR as the Benchmark in a manner substantially consistent with market practice (or if we decide that adoption of any portion of such market practice is not administratively feasible or if we determine that no market practice for the use of Three-Month Term SOFR exists, in such other manner as we determine is reasonably necessary).
- 27. "Unadjusted Benchmark Replacement" means the Benchmark Replacement excluding the Benchmark Replacement Adjustment.

Subordination

Our obligation to make any payment on account of the principal of, or interest on, the notes will be subordinate and junior in right of payment to the prior payment in full of all of our senior indebtedness. As of June 30, 2020, the Company and our consolidated subsidiaries had outstanding indebtedness, total deposits and

other liabilities of \$1.07 billion, excluding intercompany liabilities, \$1.06 billion of which would constitute senior indebtedness. The notes and the indenture do not contain any limitation on the amount of senior indebtedness that we may incur in the future.

The term "senior indebtedness" means the principal of, and premium, if any, and interest, including interest accruing after the commencement of any bankruptcy proceeding relating to us, on or substantially similar payments we make in respect of the following categories of debt, whether that debt was outstanding on the date of execution of the indenture or thereafter incurred, created or assumed:

- all of our indebtedness for borrowed money, whether or not evidenced by notes, debentures, bonds, securities or other similar instruments, and including, but not limited to all obligations to the Company's general and secured creditors;
- any deferred obligations of the Company for the payment of the purchase price of property or assets acquired other than in the ordinary course of business;
- all obligations, contingent or otherwise, of the Company in respect of any letters of credit, bankers' acceptances, security purchase facilities and similar direct credit substitutes;
- any capital lease obligations of the Company;
- all obligations of the Company in respect of interest rate swap, cap or other agreements, interest rate future or option contracts, currency swap agreements, currency future or option contracts, commodity contracts and other similar arrangements or derivative products;
- all obligations that are similar to those described in the bullets above of other persons, for the payment of which the Company is responsible or liable as obligor, guarantor or otherwise arising from an off-balance sheet guarantee, or which are secured by a lien on any property or asset of the Company; and
- all amendments, renewals, extensions, modifications and refundings of such indebtedness and obligations described in the bullets above.

However, the term "senior indebtedness" excludes:

- the notes:
- any obligation that by its terms expressly is junior to, or ranks equally in right of payment with, the notes;
- the Company's junior subordinated debentures outstanding as of October 14, 2020, to which the notes rank senior; and
- any indebtedness between the Company and any of our subsidiaries or affiliates.

In accordance with the subordination provisions of the indenture and the notes, we are permitted to make payments of accrued and unpaid interest on the notes on the interest payment dates and at maturity and to pay the principal of the notes at maturity, unless:

- we are subject to any termination, winding up, liquidation or reorganization, whether in bankruptcy, insolvency, reorganization or receivership proceedings or upon an assignment for the benefit of our creditors or any other marshalling of our assets and liabilities or otherwise; or
- a default in the payment of principal of, or premium, if any, or interest on any senior indebtedness, beyond any applicable grace period, or if any event of default with respect to any senior indebtedness will have occurred and be continuing, or would occur as a result of the payment of principal of or interest on the notes or in respect of any retirement, purchase or other acquisition of the notes, permitting the holders of such senior indebtedness (or a trustee on behalf of the holders thereof) to accelerate the maturity thereof, unless and until such default or event of default will have been cured or waived or will have ceased to exist.

Upon our termination, winding up, liquidation or reorganization, whether in bankruptcy, insolvency, reorganization or receivership proceedings or upon an assignment for the benefit of our creditors or any other marshalling of our assets and liabilities or otherwise, holders of all of our senior indebtedness will first be entitled to receive payment in full in accordance with the terms of such senior indebtedness of the principal of, and premium, if any, and interest on, that senior indebtedness before any payment is made on the notes. If, after we have paid the senior indebtedness in full, there are any amounts available for payment of the notes and any of our other indebtedness and obligations ranking equally in right of payment with the notes, then we will use such remaining assets to pay the amounts of principal of, premium, if any, and accrued and unpaid interest on the notes and such other of our indebtedness and obligations that rank equally in right of payment with the notes. If those assets are insufficient to pay in full the principal of, premium, if any, and interest on the notes and such other indebtedness and obligations, those assets will be applied ratably to the payment of such amounts owing with respect to the notes and such other indebtedness and obligations.

In the event that we are subject to any termination, winding up, liquidation or reorganization, whether in bankruptcy, insolvency, reorganization or receivership proceedings or upon an assignment for the benefit of our creditors or any other marshalling of our assets and liabilities or otherwise, if the holders of the notes receive for any reason any payment on the notes or other distributions of our assets with respect to the notes before all of our senior indebtedness is paid in full, the holders of the notes will be required to return that payment or distribution to the trustee in bankruptcy, receiver, liquidating trustee, custodian, assignee, agent or other person making payment of our assets for all our senior indebtedness remaining unpaid until all that senior indebtedness has been paid in full, after giving effect to any other concurrent payment or distribution to the holders of such senior indebtedness.

As a result of the subordination of the notes in favor of the holders of our senior indebtedness, in the event of our bankruptcy or insolvency, holders of our senior indebtedness may receive more, ratably, and holders of the notes may receive less, ratably, than our other creditors.

All liabilities of the Bank and our other subsidiaries, including deposits and liabilities to general creditors arising during the ordinary course of business or otherwise, will be effectively senior in right of payment to the notes to the extent of the assets of the subsidiary because, as a shareholder of the subsidiary, we do not have any rights to the assets of the subsidiary, except if the subsidiary declares a dividend payable to us or if there are assets of the subsidiary remaining after it has discharged its liabilities to its creditors in connection with its liquidation. As of June 30, 2020, the Bank and our other subsidiaries had total outstanding liabilities of \$1.07 billion on a consolidated basis. Over the term of the notes, we will need to rely primarily on dividends paid to us by the Bank, which is a regulated and supervised depository institution, for the funds necessary to pay the interest on our outstanding debt obligations and to make dividends and other payments on our other securities outstanding now or in the future. With respect to the payment of the principal of the notes at their maturity, we may rely on the funds we receive from dividends paid to us by the Bank, but may have to rely on the proceeds of borrowings and/or the sale of other securities to pay the principal amount of the notes. Regulatory rules may restrict the Bank's ability to pay dividends or make other distributions to us or provide funds to us by other means. As a result, with respect to the assets of the Bank, our creditors (including the holders of the notes) are structurally subordinated to the prior claims of creditors of the Bank, including its depositors, except to the extent that we may be a creditor with recognized claims against the Bank.

Redemption

We may, at our option, redeem the notes, in whole or in part, beginning on the interest payment date of October 15, 2025 and at any time thereafter. In addition, at our option, we may redeem the notes in whole, but not in part, at any time upon the occurrence of:

• a "Tier 2 Capital Event," which means our good faith determination that, as a result of (1) any amendment to or change in, or proposed amendment or change in, the laws, rules or regulations of the

United States (including the Federal Reserve Board and other federal bank regulatory agencies) or any political subdivision of or in the United States that is announced, enacted or becomes effective after October 14, 2020, or (2) any official administrative decision or judicial decision or administrative action or other official pronouncement interpreting or applying those laws, rules, regulations, policies or guidelines that is announced after October 14, 2020, there is more than an insubstantial risk that the Company will not be entitled to treat the notes as "Tier 2 Capital" (meaning Tier 2 capital (or its equivalent) for purposes of capital adequacy guidelines of the Federal Reserve Board, as then in effect and applicable to the Company);

- a "Tax Event," which means our receipt of an opinion of counsel experienced in such matters to the effect that, as a result of (1) an amendment or change, or an announced prospective amendment or change, in any law or treaty, or any regulation thereunder, of the United States or any of its political subdivisions or taxing authorities; (2) a judicial decision, administrative action, official administrative pronouncement, ruling, regulatory procedure, regulation, notice or announcement, including any notice or announcement of intent to adopt or promulgate any ruling, regulatory procedure or regulation (any of the foregoing, an "Administrative or Judicial Action"); or (3) an amendment to or change in any official position with respect to, or any interpretation of, an Administrative or Judicial Action or a law or regulation of the United States that differs from the previously generally accepted position or interpretation, in each case, which change or amendment or challenge becomes effective or which pronouncement, decision or challenge is announced on or after October 14, 2020, there is more than an insubstantial risk that interest payable by the Company on the notes is not, or, within 90 days of the date of such opinion, will not be, deductible by the Company, in whole or in part, for United States federal income tax purposes; or
- an "Investment Company Event," which means our receipt of an opinion of counsel experienced in such matters to the effect that there is more than an insubstantial risk that the Company is or, within 90 days of the date of such legal opinion will be, considered an "investment company" that is required to be registered under the Investment Company Act of 1940, as amended.

Any redemption of the notes will be at a redemption price equal to 100% of the principal amount of the notes to be redeemed, plus accrued and unpaid interest, if any, and additional interest, if and to the extent applicable, thereon to, but excluding the date of redemption. Any redemption of the notes will be subject to any required regulatory approvals, including from the Federal Reserve Board, to the extent such approval is then required.

If less than all of the notes are to be redeemed, the notes will be redeemed on a pro rata basis as to the holders, and such redemption will be made on a "Pro Rata Pass-Through Distribution of Principal" basis in accordance with the procedures of DTC. In the event a pro rata redemption is not permitted under applicable law or applicable requirements of DTC, the notes to be redeemed will be selected by lot or such method as the trustee will deem fair and appropriate.

Notices of redemption will be given in the manner provided for in the indenture to each holder of notes to be redeemed at least 30, but no more than 60 days, before the redemption date to the holders of notes to be redeemed. If any note is to be redeemed in part only, the notice of redemption that relates to that note will state the portion of the principal amount thereof to be redeemed. A new note in principal amount equal to the unredeemed portion of the original note, if any, will be issued in the name of the holder thereof upon surrender of the original note. Notes called for redemption become due and payable on the date fixed for redemption at the redemption price specified in the notice of redemption, together with any accrued and unpaid interest, if any, and additional interest, if and to the extent applicable. On and after the redemption date, interest will cease to accrue on notes or portions of notes called for redemption.

The notes are not subject to redemption at the option of the holders.

Repurchases

We may purchase notes at any time on the open market or otherwise. If we purchase notes in this manner, we have the discretion to hold, resell or surrender the notes to the trustee under the indenture for cancellation.

No Sinking Fund; Non-Convertible

The notes will not be entitled to the benefit of any sinking fund. This means that we will not deposit money on a regular basis into any separate custodial account to repay the notes. Except as contemplated by this prospectus, the notes are not convertible into, or exchangeable for, any of our or our subsidiaries' equity securities, other securities or assets.

Form, Denomination, Transfer, Exchange and Book-Entry Procedures

The notes will be issued only in registered form without coupons and in minimum denominations of \$100,000 and any integral multiple of \$1,000 in excess thereof.

The New Notes will be evidenced by a global note that will be deposited with, or on behalf of, DTC, or any successor thereto, and registered in the name of Cede & Co., or Cede, as nominee of DTC. Except as set forth below, record ownership of the global note may be transferred, in whole or in part, only to another nominee of DTC or to a successor of DTC or its nominee.

The global note will not be registered in the name of any person, or exchanged for notes that are registered in the name of any person, other than DTC or its nominee, unless one of the following occurs:

- DTC notifies us that it is unwilling or unable to continue acting as the depositary for the global note, or DTC has ceased to be a clearing agency registered under the Exchange Act, and in either case, we do not appoint a successor depositary within 90 days;
- we determine that the notes are no longer to be represented by the global note and so notify the trustee in writing; or
- an event of default with respect to the notes has occurred and is continuing and DTC has requested the issuance of notes in certificated form.

In those circumstances, DTC will determine in whose names any securities issued in exchange for the global note will be registered. Any such notes in certificated form will be issued in minimum denominations of \$100,000 and any integral multiples of \$1,000 in excess thereof and may be transferred or exchanged only in such minimum denominations.

DTC or its nominee will be considered the sole owner and holder of the global note for all purposes, and as a result:

- you cannot receive notes registered in your name if they are represented by the global note;
- you cannot receive certificated (physical) notes in exchange for your beneficial interest in the global note;
- · you will not be considered to be the owner or holder of the global note or any note it represents for any purpose; and
- all payments on the global note will be made to DTC or its nominee.

The laws of some jurisdictions require that certain kinds of purchasers (for example, certain insurance companies) can only own securities in certificated form. These laws may limit your ability to transfer your beneficial interests in the global note to these types of purchasers.

Only institutions (such as a securities broker or dealer) that have accounts with DTC or its nominee, referred to as "participants," and persons that may hold beneficial interests through participants (including through Euroclear Bank SA/NV or Clearstream Banking, société anonyme, as DTC participants) can own a beneficial interest in the global note. The only place where the ownership of beneficial interests in the global note will appear and the only way the transfer of those interests can be made will be on the records kept by DTC (for their participants' interests) and the records kept by those participants (for interests of persons held by participants on their behalf).

Secondary trading in bonds and notes of corporate issuers is generally settled in clearinghouse (that is, next day) funds. In contrast, beneficial interests in a global note usually trade in DTC's same-day funds settlement system and settle in immediately available funds. We make no representations as to the effect that settlement in immediately available funds will have on trading activity in those beneficial interests.

Cash payments of interest on and principal of the global note will be made to Cede, the nominee for DTC, as the registered owner of the global note. These payments will be made by wire transfer of immediately available funds on each payment date.

You may exchange or transfer the notes at the corporate trust office of the trustee for the notes or at any other office or agency maintained by us for those purposes. We will not require payment of a service charge for any transfer or exchange of the notes, but we may require payment of a sum sufficient to cover any applicable tax or other governmental charge.

We have been informed that, with respect to any cash payment of interest on or principal of the global note, DTC's practice is to credit participants' accounts on the payment date with payments in amounts proportionate to their respective beneficial interests in the notes represented by the global note as shown on DTC's records, unless DTC has reason to believe that it will not receive payment on that payment date. Payments by participants to owners of beneficial interests in notes represented by the global note held through participants will be the responsibility of those participants, as is now the case with securities held for the accounts of customers registered in "street name."

We also understand that neither DTC nor Cede will consent or vote with respect to the notes. We have been advised that, under its usual procedures, DTC will mail an "omnibus proxy" to us as soon as possible after the record date. The omnibus proxy assigns Cede's consenting or voting rights to those participants to whose accounts the notes are credited on the record date identified in a listing attached to the omnibus proxy.

Because DTC can only act on behalf of participants, who in turn act on behalf of indirect participants, the ability of a person having a beneficial interest in the principal amount represented by the global note to pledge the interest to persons or entities that do not participate in the DTC book-entry system, or otherwise take actions in respect of that interest, may be affected by the lack of a physical certificate evidencing its interest.

DTC has advised that it will take any action permitted to be taken by a holder of notes (including the presentation of notes for exchange) only at the direction of one or more participants to whose account with DTC interests in the global note are credited and only in respect of such portion of the principal amount of the notes represented by the global note as to which such participant has, or participants have, given such direction.

DTC has also advised as follows: DTC is a limited purpose trust company organized under the laws of the State of New York, a "banking organization" within the meaning of the New York Banking Law, a member of the Federal Reserve, a "clearing corporation" within the meaning of the Uniform Commercial Code, as amended, and a "clearing agency" registered pursuant to the provisions of Section 17A of the Exchange Act. DTC was created to hold securities for its participants and facilitate the clearance and settlement of securities transactions between participants through electronic book-entry changes in accounts of its participants. Participants include securities brokers and dealers, banks, trust companies and clearing corporations and may include certain other

organizations. Certain of such participants (or their representatives), together with other entities, own DTC. Indirect access to the DTC system is available to other entities such as banks, brokers, dealers and trust companies that clear through or maintain a custodial relationship with a participant, either directly or indirectly. The rules applicable to DTC and its direct and indirect participants are on file with the SEC.

The policies and procedures of DTC, which may change periodically, will apply to payments, transfers, exchanges and other matters relating to beneficial interests in the global note. We and the trustee have no responsibility or liability for any aspect of DTC's or any participants' records relating to beneficial interests in the global note, including for payments made on the global note, and we and the trustee are not responsible for maintaining, supervising or reviewing any of those records.

Indenture Covenants

The indenture contains no covenants or restrictions on the incurrence of indebtedness or other obligations by us or by a subsidiary of ours, including the Bank. The indenture contains no financial covenants requiring us to achieve or maintain any minimum financial results relating to our financial condition, liquidity or results of operations or meet or exceed any financial ratios, as a general matter, to incur additional indebtedness or obligations or to maintain any reserves. Moreover, neither the indenture nor the notes contain any covenants prohibiting us or our subsidiaries from or limiting our or our subsidiaries' right to incur additional indebtedness or obligations, grant liens on our assets to secure our indebtedness or other obligations that are senior in right of payment to the notes, repurchase our stock or other securities, including any of the notes, or pay dividends or make other distributions to our shareholders (except, subject to certain limited exceptions, in the case of dividends or other distributions, redemptions, purchases, acquisitions or liquidation payments with respect to our capital stock and repayments, repurchases or redemptions of any debt securities that rank equal with or junior to the notes, in each case, upon our failure to make any required payment of principal or interest on the notes, when the same becomes due and payable). In addition, neither the indenture nor the notes contain any provision that would provide protection to the holders of the notes against a material decline in our credit quality.

Events of Default; Right of Acceleration; Failure to Pay Principal or Interest

The following are events of default under the indenture:

- the entry of a decree or order for relief in respect of us by a court having jurisdiction in the premises in an involuntary case or proceeding
 under any applicable bankruptcy, insolvency or reorganization law, in effect at the time we entered into the indenture or thereafter in effect
 of the United States or any political subdivision thereof, and such decree or order will have continued unstayed and in effect for a period of
 45 consecutive days;
- the commencement by us of a voluntary case under any applicable bankruptcy, insolvency or reorganization law, in effect at the time we entered into the indenture or thereafter in effect of the United States or any political subdivision thereof, or our consent to the entry of a decree or order for relief in an involuntary case or proceeding under any such law;
- our failure to pay any installment of interest on any of the notes as and when the same will become due and payable, and the continuation of such failure for a period of 15 days;
- our failure to pay all or any part of the principal of any of the notes as and when the same will become due and payable under the indenture;
- our failure to perform any other covenant or agreement on our part contained in the notes or in the indenture, and the continuation of such failure for a period of 45 days after the date on which a notice specifying such failure, stating that such notice is a "Notice of Default" under the indenture and demanding that we remedy the same, is given to us by the trustee, or is given to us and the trustee by the holders of at least 25% in aggregate principal amount of the notes at the time outstanding; and

our default under any bond, debenture, note or other evidence of indebtedness for money borrowed by us having an aggregate principal amount outstanding of at least \$25,000,000, whether such indebtedness existed at the time we entered into the indenture or was thereafter created or incurred, which default (i) constitutes a failure to pay any portion of the principal of such indebtedness when due and payable after the expiration of any applicable grace period or (ii) results in such indebtedness becoming due, or being declared due, and payable prior to the date on which it otherwise would have become due and payable without, in the case of clause (i), such indebtedness having been discharged or, in the case of clause (ii), without such indebtedness having been discharged or such acceleration having been rescinded or annulled.

If an event of default with respect to the notes occurs due to a bankruptcy event described in the first two bullets above, then the principal of all of the outstanding notes and all accrued and unpaid interest, if any, thereon will become immediately due and payable without any declaration or other act on the part of the trustee or any holder of the notes. If an event of default with respect to the notes occurs due to any reason other than a bankruptcy event, neither the trustee nor any holder may accelerate the maturity of the notes.

Under the indenture, if we fail to pay any installment of interest on any note when such interest becomes due and payable, and such default continues for a period of 15 days, or if we fail to pay all or any part of the principal of any note when such principal becomes due and payable, the trustee may, subject to certain limitations and conditions, demand that we pay to the trustee, for the benefit of the holders of the notes, the whole amount then-due and payable with respect to such notes, with interest upon the overdue principal and, to the extent permitted by applicable law, upon any overdue installments of interest at the rate or respective rates, as the case may be, provided for or with respect to such notes or, if no such rate or rates are so provided, at the rate or respective rates, as the case may be, of interest borne by such notes. Any rights to receive payment of such amounts under the notes remain subject to the subordination provisions of the notes as discussed above under "—Subordination." Neither the trustee nor the holders of the notes will have the right to accelerate the maturity of the notes in the case of our failure to pay the principal of or interest on the notes or our non-performance of any other covenant or warranty under the notes or the indenture.

Amendment, Supplement and Waiver

Without the consent of any holder of notes, we and the trustee, at any time and from time to time, may enter into one or more supplemental indentures, in form satisfactory to the trustee for any of the following purposes:

- to evidence the succession of another person to the Company and the assumption by any such successor of our covenants contained in the indenture and in the notes;
- to add to covenants of the Company for the benefit of holders of the notes or to surrender any right or power conferred upon us with respect to the notes issued under the indenture;
- to permit or facilitate the issuance of notes in uncertificated or global form, provided any such action will not adversely affect the interests
 of the holders of then outstanding notes;
- to evidence and provide for the acceptance of appointment under the indenture by a successor trustee with respect to the notes and to add to or change any of the provisions of the indenture, as necessary, to provide for or facilitate the administration of the trusts thereunder by more than one trustee, in accordance with the requirements set forth in the indenture;
- to cure any ambiguity or to correct or supplement any provision in the indenture that may be defective or that may be inconsistent with any other provision therein;
- to make any other provisions with respect to matters or questions arising under the indenture that will not adversely affect the interests of the holders of then-outstanding notes in any material respect;
- to add any additional events of default;

- to supplement any of the provisions of the indenture to such extent necessary to permit or facilitate the legal defeasance, covenant defeasance and/or satisfaction and discharge of the notes in accordance with the indenture, provided that any such action will not adversely affect the interests of any holder of notes in any material respect;
- to provide for the issuance of the New Notes pursuant to the exchange offer;
- to conform any provision in the indenture to the requirements of the Trust Indenture Act; or
- · to make any change that does not adversely affect the legal rights under the indenture of any holder of then-outstanding notes.

With the consent of the holders of not less than a majority in principal amount of the outstanding notes, we and the trustee may enter into one or more supplemental indentures for the purpose of adding any provisions to, or changing in any manner, eliminating any of the provisions of the indenture or of the notes or of modifying in any manner the contractual rights of the holders of the notes under the indenture, except that no such supplemental indenture, without the consent of the holder of each outstanding note affected thereby, will:

- reduce the rate of or change the time for payment of interest, including defaulted interest, on any notes;
- reduce the principal of or change the stated maturity of any notes or change the date on which any notes may be subject to redemption or reduce the redemption price therefor;
- make any note payable in money other than U.S. dollars;
- make any change in provisions of the indenture protecting the right of each holder of the notes to receive payment of principal of and interest on such notes on or after the due date thereof or setting forth the right to bring suit to enforce such payment;
- reduce the percentage of principal amount of outstanding notes whose holders' consent is required for any supplemental indenture, or any waiver of compliance with certain provisions of the indenture or certain defaults under the indenture and their consequences, as provided in the sections of the indenture relating to waiver of past defaults or waiver of certain covenants; or
- modify any of the provisions of the section of the indenture governing supplemental indentures with the consent of holders, or those
 provisions relating to waiver of past defaults or waiver of certain covenants, except to increase any such percentage required for such
 actions or to provide that certain other provisions of the indenture cannot be modified or waived without the consent of the holder of each
 outstanding note affected thereby.

The holders of not less than a majority in aggregate principal amount of the outstanding notes may, on behalf of the holders of all notes, waive any past default under the indenture and its consequences, except a default in the payment of the principal of, or interest on, any note, or in respect of a covenant or provision of the indenture which, under the terms of the indenture, cannot be modified or amended without the consent of the holder of each outstanding note.

Satisfaction and Discharge of the Indenture; Defeasance

We may terminate our obligations under the indenture when:

• either: (i) all notes (with certain specified exceptions) have been delivered to the trustee for cancellation, or (ii) all notes that have not been delivered to the trustee for cancellation (a) have become due and payable, (b) will become due and payable at their stated maturity within one year or (c) if redeemable at our option, are to be called for redemption within one year under arrangements reasonably satisfactory to the trustee for the giving of notice of redemption by the trustee, and we have deposited or caused to be deposited with the trustee funds in an amount sufficient to pay and discharge the entire indebtedness on such outstanding notes, including the applicable principal and interest on such notes;

- · we have paid or caused to be paid all other sums payable by us under the indenture with respect to the outstanding notes; and
- we have delivered to the trustee an officers' certificate and an opinion of counsel, each stating that all conditions precedent under the indenture relating to the satisfaction and discharge of the indenture have been satisfied.

We may elect, at our option and at any time, to have our obligations discharged with respect to the outstanding notes, which we refer to as "legal defeasance." "Legal defeasance" means that we will be deemed to have paid and discharged the entire indebtedness represented by the outstanding notes and will be deemed to have been discharged from our obligations with respect to the outstanding notes, except that the following rights and obligations will survive until otherwise terminated or discharged under the indenture:

- the rights of the holders of such outstanding notes to receive payments in respect of the principal of and interest on such notes when payments are due;
- our and the trustee's obligations with respect to such notes concerning registration of notes, mutilated, destroyed, lost and stolen notes, maintenance of an office or agency for payment and money for payments on the notes to be held in trust;
- · the rights, powers, trusts, duties and immunities of the trustee under the indenture; and
- the defeasance provisions of the indenture.

In addition, we may elect, at our option, to have our obligations released with respect to certain covenants contained in the indenture, which we refer to as "covenant defeasance."

In order to exercise either legal defeasance or covenant defeasance with respect to outstanding notes:

- we will irrevocably have deposited or caused to be deposited with the trustee as trust funds in trust for the purpose of making the following payments, specifically pledged as security for, and dedicated solely to, the benefit of the holders of outstanding notes, (i) an amount in U.S. dollars, (ii) government obligations that through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide, not later than one calendar day before the due date of any payment of principal of and interest, if any, on such notes, money or (iii) a combination thereof, in any case, in an amount, sufficient, without consideration of any reinvestment of such principal and interest, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the trustee, to pay and discharge, and which will be applied by the trustee to pay and discharge, the principal of and interest, if any, on, such outstanding notes on the stated maturity of such principal or installment of principal or interest or the applicable redemption date, as the case may be;
- such legal defeasance or covenant defeasance will not result in a breach or violation of, or constitute a default under, the indenture or any other material agreement or instrument to which we or any of our subsidiaries are a party or by which we or any of them are bound;
- no event of default or event which, with notice or lapse of time or both, would become an event of default with respect to such notes will have occurred and be continuing on the date of such deposit, and, solely in the case of legal defeasance, no event of default or event which, with notice or lapse of time or both, would become an event of default under the indenture will have occurred and be continuing at any time during the period ending on and including the 91st day after the date of such deposit (it being understood that this condition to legal defeasance will not be deemed satisfied until the expiration of such period);
- in the case of legal defeasance, we will have delivered to the trustee an opinion of counsel stating that (i) we have received from, or there has been published by, the Internal Revenue Service a ruling or

- (ii) since the date of the indenture, there has been a change in applicable federal income tax law, in either case, to the effect that, and based thereon, such opinion of independent counsel will confirm that, the holders of such outstanding notes will not recognize income, gain or loss for federal income tax purposes as a result of such legal defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such legal defeasance had not occurred;
- in the case of covenant defeasance, we will have delivered to the trustee an opinion of counsel to the effect that the holders of such outstanding notes will not recognize income, gain or loss for federal income tax purposes as a result of such covenant defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such covenant defeasance had not occurred;
- we will have delivered to the trustee an officers' certificate and an opinion of counsel, each stating that all conditions precedent to the legal defeasance or covenant defeasance, as the case may be, under the indenture have been satisfied;
- if the moneys or government obligations, or combination thereof, as the case may be, deposited are sufficient to pay the principal of and interest, if any, on such notes, provided that such notes are redeemed on a particular redemption date, we will have given the trustee irrevocable instructions to redeem such notes on such date and to provide notice of such redemption to holders of such notes as provided in or under the indenture; and
- the trustee will have received such other documents, assurances and opinions of counsel as the trustee will have reasonably required.

In connection with a discharge or defeasance, in the event the trustee is unable to apply the moneys deposited as contemplated under the satisfaction and discharge provisions of the indenture by reason of any legal proceeding or any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, our obligations under the indenture and the notes will be revived as if the deposit had never occurred.

Regarding the Trustee

UMB Bank, N.A. is acting as the trustee under the indenture and the initial paying agent and registrar for the notes. From time to time, we and some of our subsidiaries may maintain deposit accounts and conduct other banking transactions, including lending transactions, with the trustee in the ordinary course of business.

Except during the continuance of an event of default under the indenture, the trustee will perform only such duties as are specifically set forth in the indenture.

The indenture and the Trust Indenture Act contain certain limitations on the rights of the trustee, if it becomes a creditor of our organization, to obtain payment of claims in certain cases or to realize on certain property received in respect of any such claim as security or otherwise. The trustee will be permitted to engage in other transactions; however, if it acquires any "conflicting interest" (as defined in the Trust Indenture Act), it must eliminate such conflict within 90 days and apply to the SEC for permission to continue or resign.

The holders of a majority in aggregate principal amount of the outstanding notes will have the right to direct the time, place and method of conducting any proceeding for any remedy available to the trustee or to exercise any trust or power conferred on the trustee, subject to certain exceptions. If an event of default has occurred and is continuing, the trustee will exercise such of the rights and powers vested in it by the indenture and use the same degree of care and skill in its exercise, as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs. Subject to such provisions, the trustee will be under no obligation to exercise any of the rights or powers vested in it by the indenture at the request or direction of any holder under

the indenture, unless such holder will have offered to the trustee security or indemnity satisfactory to the trustee against the losses, liabilities and expenses that might be incurred by it in compliance with such request or direction.

No Personal Liability of Shareholders, Employees, Officers, Directors or Exchange Agent

None of our or any of our predecessors' or successors' past, present or future shareholders, employees, officers or directors, as such or in such capacity, nor the exchange agent will have any personal liability for any of our obligations under the notes or the indenture by reason of his, her or its status as such shareholder, employee, officer or director. Each holder of notes, by accepting a note, waives and releases all such liability. The waiver and release are part of the consideration for the issuance of the notes. Such waiver may not be effective to waive liabilities under the federal securities laws, and it is the view of the SEC that such a waiver is against public policy.

Governing Law

The notes and the indenture are governed by and will be construed in accordance with the laws of the State of New York.

MATERIAL UNITED STATES FEDERAL INCOME TAX CONSIDERATIONS

The following is a general summary of the material U.S. federal income tax considerations of the exchange of outstanding Old Notes for New Notes in the exchange offer. It is not a complete analysis of all the potential tax considerations relating to the exchange of outstanding Old Notes for New Notes. This discussion is based upon the provisions of the Internal Revenue Code of 1986, as amended, or the Code, existing and proposed regulations under the Code and any administrative and judicial interpretations and rulings thereof, all as currently in effect. These authorities are subject to change, possibly on a retroactive basis, and subject to differing interpretations. We cannot assure you that the Internal Revenue Service will not challenge one or more of the tax consequences described in this prospectus, and we have not obtained, and do not intend to obtain, a ruling from the Internal Revenue Service or an opinion of counsel with respect to the U.S. federal income tax consequences described herein. Furthermore, this discussion does not address the tax considerations arising under the laws of any foreign, state or local jurisdiction or any non-income tax consequences of the exchange of Old Notes for New Notes.

This discussion is limited to the U.S. federal income tax consequences applicable to holders that purchased their Old Notes from us in the initial offering and at the initial offering price for cash and who held such Old Notes, and will now hold the New Notes, as "capital assets" within the meaning of Section 1221 of the Code. This discussion does not address all U.S. federal income tax considerations that may be applicable to each holder's particular circumstances or to holders that may be subject to special tax rules under U.S. federal income tax laws, including, but not limited to, banks, insurance companies, other financial institutions, regulated investment companies, real estate investment trusts, tax-exempt organizations, dealers or traders in securities, commodities or currencies, U.S. expatriates, controlled foreign corporations, passive foreign investment companies, holders subject to the alternative minimum tax, traders in securities that elect to use a mark-to-market method of accounting for their securities holdings, U.S. holders whose functional currency is not the U.S. dollar, persons that will hold the New Notes as a position in a hedging transaction, straddle or conversion transaction or as part of a "synthetic security," other integrated transactions or risk reduction transaction, persons deemed to sell the New Notes under the constructive sale provisions of the Code, persons that will hold the New Notes in an individual retirement account, 401(k) plan or similar tax-favored account, an accrual method taxpayer who is required to recognize income for U.S. federal income tax purposes or entities or arrangements classified as partnerships for U.S. federal income tax purposes or other pass-through entities, or investors in such entities.

The exchange of Old Notes for New Notes in the exchange offer should not constitute a taxable exchange for U.S. federal income tax purposes. Consequently, (i) a holder of Old Notes should not recognize gain or loss upon the receipt of New Notes in the exchange offer, (ii) a holder's basis in the New Notes received in the exchange offer should be the same as such holder's basis in the Old Notes surrendered in exchange therefor immediately before the exchange and (iii) a holder's holding period in the New Notes should include such holder's holding period in the Old Notes surrendered in exchange therefor.

This discussion of material U.S. federal income tax considerations is for general information only and may not be applicable, depending upon a holder's particular situation. Holders of Old Notes considering the exchange offer are urged to consult their own tax advisors with respect to the tax consequences to them of exchanging Old Notes for New Notes, including the tax consequences under state, local, estate, foreign and other tax laws and the possible effects of changes in United States or other tax laws.

PLAN OF DISTRIBUTION

Any broker-dealer that holds Old Notes acquired for its own account as a result of market-making activities or other trading activities and receives New Notes for its own account pursuant to the exchange offer may be a statutory underwriter and must deliver a prospectus meeting the requirements of the Securities Act in connection with any resale of such New Notes. This prospectus, as it may be amended or supplemented from time to time, may be used by any such broker-dealer in connection with any resale of New Notes received in exchange for such Old Notes, provided that such broker-dealer notifies the Company to that effect in accordance with the instructions in the letter of transmittal. We will make additional copies of this prospectus, and any amendments or supplements hereto, available to any such broker-dealer that so requests in accordance with the instructions in the letter of transmittal. To the extent that any notifying broker-dealer participates in the exchange offer, we will use our commercially reasonable efforts to maintain the effectiveness of this prospectus for a period of 180 days following the expiration date of the exchange offer.

We will not receive any proceeds from any sale of New Notes by broker-dealers or any other persons. New Notes received by broker-dealers for their own account pursuant to the exchange offer may be sold from time to time in one or more transactions in the over-the-counter market, in negotiated transactions, through the writing of options on New Notes or a combination of such methods of resale, at market prices prevailing at the time of resale, at prices related to such prevailing market prices or at negotiated prices. Any such resale may be made directly to purchasers or to or through brokers or dealers who may receive compensation in the form of commissions or concessions from any such broker-dealer and/or the purchasers of any New Notes. Any broker-dealer that holds Old Notes acquired for its own account as a result of market-making activities or other trading activities and receives New Notes for its own account pursuant to the exchange offer and resells such New Notes and any broker-dealer that participates in a distribution of such New Notes may be a statutory "underwriter" within the meaning of the Securities Act, and any profit on any such resale of New Notes and any commission or concessions received by any such persons may be deemed to be underwriting compensation under the Securities Act. The letter of transmittal states that, by acknowledging that it will deliver and by delivering a prospectus meeting the requirements of the Securities Act in connection with the resale of any such New Notes, a broker-dealer will not be deemed to admit that it is an "underwriter" within the meaning of the Securities Act.

We will promptly send additional copies of this prospectus, and any amendments or supplements hereto, available to any such broker-dealer that so requests in accordance with the instructions in the letter of transmittal. We have agreed to pay certain expenses in connection with the exchange offer and will indemnify the holders of the Old Notes (including any broker-dealers) against certain liabilities, including certain liabilities under the Securities Act.

LEGAL MATTERS

The validity of the New Notes will be passed upon for us by Luse Gorman, PC, Washington, D.C.

EXPERTS

The consolidated financial statements of Pathfinder Bancorp, Inc. as of December 31, 2019 and 2018 and for each of the years in the two-year period ended December 31, 2019, included elsewhere in this prospectus in reliance upon the report of Bonadio & Co., LLP, independent registered public accounting firm and upon the authority of said firm as experts in accounting and auditing.

ANNEX A

FINANCIAL AND OTHER ADDITIONAL INFORMATION ABOUT PATHFINDER BANCORP, INC.

Pathfinder Bancorp, Inc.'s Business

Pathfinder Bancorp, Inc. (the "Company") is a Maryland corporation headquartered in Oswego, New York. The primary business of the Company is its investment in Pathfinder Bank (the "Bank") which is 100% owned by the Company. The Company is subject to supervision and regulation by the Board of Governors of the Federal Reserve System (the "Federal Reserve Board"). Pathfinder Bank is a commercial bank chartered by the New York State Department of Financial Services (the "NYSDFS").

The Company owns a non-consolidated Delaware statutory trust subsidiary, Pathfinder Statutory Trust II, of which 100% of the common equity is owned by the Company. Pathfinder Statutory Trust II was formed in connection with the issuance of \$5.2 million in trust preferred securities.

At June 30, 2020, 4,753,883 shares of Company common stock were outstanding, respectively. In addition, the Company had 1,155,283 shares of Series B convertible perpetual preferred stock outstanding at June 30, 2020.

At June 30, 2020, the Company had total consolidated assets of \$1.2 billion, total deposits of \$970.6 million and shareholders' equity of \$92.6 million plus a noncontrolling interest of \$292,000, which represents the 49% of the FitzGibbons Agency, LLC not owned by the Company.

The Company's executive office is located at 214 West First Street, Oswego, New York and the telephone number at that address is (315) 343-0057. Its internet address is www.pathfinderbank.com. Information on our website is not and should not be considered to be a part of this prospectus.

Pathfinder Bank's Business

The Bank is a New York-chartered commercial bank and its deposit accounts are insured up to applicable limits by the Federal Deposit Insurance Corporation ("FDIC") through the Deposit Insurance Fund ("DIF"). The Bank is subject to extensive regulation by the NYSDFS, as its chartering agency, and by the FDIC, as its deposit insurer and primary federal regulator. The Bank is a member of the Federal Home Loan Bank of New York ("FHLBNY") and is also subject to certain regulations by the Federal Home Loan Bank System.

The Bank is primarily engaged in the business of attracting deposits from the general public in the Bank's market area, and investing such deposits, together with other sources of funds, in loans secured by residential and commercial real estate, and commercial business and consumer assets other than real estate. In addition, the Bank originates unsecured small business and consumer loans. The Bank also invests a portion of its assets in a broad range of debt securities issued by the United States Government and its agencies and sponsored enterprises, state and municipal governments and agencies, and corporations. The Company also invests in mortgage-backed securities issued or guaranteed by United States Government sponsored enterprises, collateralized mortgage obligations and similar debt securities issued by both government sponsored entities and private (non-governmental) issuers, and asset-backed securities that are generally issued by private entities. The Company invests primarily in debt securities but will, within certain regulatory limits, invest from time to time in mutual funds and equity securities. The Bank's principal sources of funds are deposits, principal and interest payments on loans and investments, as well as borrowings from correspondent financial institutions. The principal source of the Company's income is interest on loans and investment securities. The Bank's principal expenses are interest paid on deposits and borrowed funds, employee compensation and benefits, data processing and facilities.

The Bank has two wholly owned operating subsidiaries, Pathfinder Risk Management Company, Inc. ("PRMC") and Whispering Oaks Development Corp. All significant inter-company accounts and activity have

been eliminated in consolidation. Although the Company owns, through its subsidiary PRMC, 51% of the membership interest in FitzGibbons Agency, LLC ("Agency"), the Company is required to consolidate 100% of FitzGibbons within the consolidated financial statements. The 49% of which the Company does not own is accounted for separately as noncontrolling interests within the consolidated financial statements.

Background and Strategy

On October 16, 2014, Pathfinder Bancorp, MHC converted from the mutual to stock form of organization (the "Conversion"). In connection with the Conversion, the Company sold 2,636,053 shares of common stock to depositors at \$10.00 per share. Shareholders of Pathfinder Bancorp, Inc., a federal corporation ("Pathfinder-Federal"), the Company's predecessor, received 1.6472 shares of the Company's common stock for each share of Pathfinder-Federal common stock they owned immediately prior to completion of the transaction. Following the completion of the Conversion, Pathfinder-Federal was succeeded by the Company and Pathfinder Bancorp, MHC ceased to exist.

On June 1, 2016, Pathfinder Bank, a savings bank chartered by the NYSDFS, merged into Pathfinder Commercial Bank, a limited purpose commercial bank also chartered by the NYSDFS. Prior to the merger, Pathfinder Bank owned 100% of Pathfinder Commercial Bank. On that same date, NYSDFS expanded the powers that it had previously granted to Pathfinder Commercial Bank and chartered Pathfinder Commercial Bank as a fully-empowered commercial bank. Simultaneously, the entity that had operated as "Pathfinder Commercial Bank" changed its name to "Pathfinder Bank." As a result of this charter conversion and accompanying name change, the entity now known as "Pathfinder Bank" is a commercial bank with the full range of powers granted under a commercial banking charter in New York State. The merger, which had no effect on the Company's results of operations, converted the consolidated Bank from a savings bank to a commercial bank and was completed in order to better align the Bank's organization certificate with its long-term strategic focus.

Since the Conversion, we have substantially transformed our business activities from those of a traditional savings bank to those of a commercial bank. This transformation of activities has significantly affected the overall composition of our balance sheet. While not reducing our role as a leading originator of one-to-four family residential real estate loans within our marketplace, which had been our primary focus as a savings bank, we have substantially grown our commercial business and commercial real estate loan portfolios since the Conversion. As a commercial bank, we have been able to offer customized products and services to meet individual commercial customer needs and thereby more definitively differentiate our services from those offered by our competitors. As a result, we have been able to create a substantially more diversified loan portfolio than the one that was in place before the completion of the Conversion. When compared to the Bank's loan portfolio composition prior to the Conversion, it is our view that our current asset portfolio (1) significantly improves upon the distribution of credit risk across a broader range of borrowers, industries and collateral types, and (2) is more likely to generate consistent net interest margins in a broader range of interest rate environments due to the portfolio's increased percentage of shorter-term and/or adjustable-rate assets. In a concurrent effort, the Bank has been able to fund the majority of the high level of growth in our loan portfolios primarily with deposits gathered from our local community. We believe that we have gathered these deposits at a reasonable overall cost in terms of deposit interest rates, as well as at a reasonable overall level of related infrastructure and customer support service expenses.

On May 8, 2019, the Company entered into a Securities Purchase Agreement (the "Securities Purchase Agreement") with Castle Creek Capital Partners VII, L.P. ("Castle Creek"), pursuant to which the Company sold: (i) 37,700 shares of the Company's common stock, par value \$0.01 per share, at a purchase price of \$14.25 per share (the "Common Stock"); (ii) 1,155,283 shares of a new series of preferred stock, Series B convertible perpetual preferred stock, par value \$0.01 per share, at a purchase price of \$14.25 per share (the "Series B Preferred Stock"); and (iii) a warrant, with an approximate fair value of \$373,000, to purchase 125,000 shares of Common Stock at an exercise price initially equal to \$14.25 per share (the "Warrant"), in a private placement transaction (the "Private Placement") for gross proceeds of approximately \$17.0 million. The Securities Purchase Agreement contains significant representations, warranties, and covenants of the Company and Castle Creek.

The Company also entered into subscription agreements dated as of May 8, 2019 (the "Subscription Agreements") with certain directors and executive officers of the Company as well as other accredited investors. Pursuant to the Subscription Agreements, the investors purchased an aggregate of 269,277 shares of Common Stock at \$14.25 per share for gross proceeds of approximately \$3.8 million, before payment of placement fees and related costs and expenses. The Subscription Agreements contain representations, warranties, and covenants of the purchasers and the Company that are customary in private placement transactions.

In total, therefore, the Company issued 306,977 shares of Common Stock, 1,155,283 shares of Series B Preferred Stock and the Warrant at the conclusion of the Private Placement. The transaction raised \$20.8 million in gross proceeds and the final net cash received from the Private Placement, after all issuance expenses, including placement fees and all other issuance/due diligence costs of \$927,000 and \$342,000, respectively, was \$19.6 million. The fair value of the Warrant at the time of issuance was \$373,000. Following the Private Placement, the Company used the net cash received from the transaction to strengthen the Company's general capital and liquidity positions, fund growth within our marketplace, purchase certain loan assets, and increase the regulatory capital position of the Bank. The Company will continue to use the additional capital raised through the Private Placement primarily to support the realization of continued growth opportunities within our marketplace and, to a lesser extent, for general corporate purposes.

On May 8, 2019, the Company filed Articles Supplementary with the Maryland Department of Assessments and Taxation to issue 1,155,283 shares of Series B Preferred Stock to Castle Creek. Each share of the Series B Preferred Stock will be convertible on a one-for-one basis into either (i) Common Stock under certain circumstances or (ii) non-voting common stock, par value \$0.01 per share (which will also be convertible into Common Stock), subject to approval of the creation of such class of non-voting common stock by the Company's stockholders.

Pursuant to Nasdaq rules, Castle Creek may not convert the Series B Preferred Stock or, in the future, the non-voting common stock into Common Stock, or exercise the Warrant if doing so would cause Castle Creek, when combined with the purchases of certain directors and executive officers of the Company as well as other accredited investors in the Private Placement, to own more than 19.99% of the Common Stock outstanding immediately prior to the execution of the Securities Purchase Agreement (the "Exchange Cap"). The Company must request stockholder approval to eliminate the Exchange Cap no later than at the 2021 annual meeting of Company shareholders. In addition, Castle Creek will need the approval or non-objection of the Board of Governors of the Federal Reserve System and the New York State Department of Financial Services if it seeks to increase its ownership of shares of Common Stock in excess of 9.9% of the outstanding shares of Common Stock.

Holders of the Series B Preferred Stock will be entitled to receive dividends if declared by the Company's board of directors, in the same per share amount as paid on the Common Stock. No dividends would be payable on the Common Stock unless a dividend identical to that paid on the Common Stock is payable at the same time on the Series B Preferred Stock. The Series B Preferred Stock will rank, as to payments of dividends and distribution of assets upon dissolution, liquidation or winding up of the Company, *pari passu* with the Common Stock pro rata. Holders of Series B Preferred Stock will have no voting rights except as may be required by law. The Series B Preferred Stock will not be redeemable by either the Company or by the holder.

As discussed above, pursuant to the Securities Purchase Agreement, on May 8, 2019, the Company issued a Warrant to Castle Creek to purchase 125,000 shares of Common Stock at an exercise price equal to \$14.25 per share. At the same time, the Company entered into a Warrant Agreement with Castle Creek, to, among other things, authorize and establish the terms of the Warrant. The Warrant is exercisable at any time after May 8, 2019, and from time to time, in whole or in part, until May 8, 2026. However, the exercise of such Warrant remains subject to certain contractual provisions, the Exchange Cap, and regulatory approval if Castle Creek's ownership of Common Stock would exceed 9.9%. At June 30, 2020, Castle Creek owned approximately 9.9% of the Company's common stock. The Warrant will receive dividends equal to the amount paid on the Company's

common stock. The dividend payment shall be calculated on (1) the unexercised portion of the 125,000 notional shares encompassed within the terms of the Warrant, less (2) any exercised portion of the 125,000 shares, times (3) the amount of the quarterly dividend paid to common shareholders. Dividend payments, if declared on the Company's common stock, will be made on the Warrant until its expiration date.

Pursuant to the terms of the Securities Purchase Agreement, Castle Creek is entitled to have one representative appointed to the Company's board of directors for so long as Castle Creek, together with its respective affiliates, owns, in the aggregate, 4.9% or more of all of the outstanding shares of the Company's Common Stock. If Castle Creek, together with its respective affiliates, owns, in the aggregate, 4.9% or more of all of the outstanding shares of the Company's Common Stock and does not have a board representative appointed to the Company's board of directors, the Company will invite a person designated by Castle Creek to attend meetings of the Company's Board of Directors as an observer. As of June 30, 2020, Castle Creek elected to have an observer present at substantially all meetings of the Company's board of directors.

We have consistently maintained our historically strong presence in consumer deposit gathering and residential mortgage lending activities. Notwithstanding the retention of these business lines, we have strategically emphasized developing our business and commercial banking franchise by offering products that are attractive to small-to medium-sized businesses in our market area. We differentiate our commercial loan solutions and related services through the maintenance of high standards of customer service, solution flexibility and convenience. Highlights of our business strategy are as follows:

- Continuing our emphasis on commercial business and commercial real estate lending. In recent years, we have successfully increased our commercial business and commercial real estate lending activities and portfolio size, consistent with safe and sound underwriting practices. In this regard, we have added, and will continue to add, personnel who are experienced in originating, underwriting and servicing commercial real estate and commercial business loans. We view the growth of our commercial business and commercial real estate loans as a means of further diversifying and increasing our interest income. In increasing our business banking activities, we are continuously deepening relationships with local businesses, which offer recurring and potentially increasing sources of both fee income and lower-cost transactional deposits. In that regard, our emphasis on commercial business and commercial real estate lending has complimented, and will continue to compliment, our traditional one-to-four family residential real estate lending and consumer deposit gathering franchises.
- **Providing quality customer service.** Our strategy emphasizes providing quality customer service and meeting the financial needs of our customer base by offering a full complement of loan, deposit, financial services and online banking solutions. Our competitive advantage is our ability to make decisions, such as approving loans, more quickly than our larger competitors. Customers enjoy, and will continue to enjoy, access to senior executives and local decision makers at the Bank and the flexibility that that access brings to their businesses.
- Optimizing our deposit mix. We seek to enhance the overall characteristics of our organically-sourced deposit base by emphasizing both consumer and business nonmaturity deposit gathering. We also seek to reduce our overall reliance on borrowed funds and brokered deposits as a source of funding for future asset growth. During the second half of 2019, we began a significant refocusing of the Company's resources, most notably through personnel training, modifications to incentive programs, and the high prioritization of operationalizing and/or enhancing customer-facing technologies that are focused on transactional deposits. The goal of these efforts was to better position the Company to compete in our marketplace for these types of deposits in future periods. We expect to make nonmaturity deposit gathering a point of significant organizational focus for the foreseeable future.
- Continuing to grow our customer relationships and deposit base by expanding our branch network. As conditions permit, we will expand our branch network through a combination of de novo branching and, potentially, acquisitions of branches and/or other financial services companies. We believe that as we expand our branch network, our customer relationships and deposit base will continue to grow. Our

branch expansion focus will be primarily within Onondaga County, NY, which encompasses the greater Syracuse, NY area. We currently have three branches in Onondaga County, including the branch in Clay, NY that we opened in the fourth quarter of 2018. We continue to actively seek opportunities for an increased presence within that marketplace. This is consistent with our belief that we have already achieved meaningful brand recognition among potential customers there. In addition to the full-service branches located in Oswego and Onondaga Counties, we opened, in 2017, a loan production office in Utica, located in Oneida County, NY, to increase our availability to potential commercial and business loan customers within that market area. We will continue to seek similar branch network expansion opportunities in the future.

Consistent with this strategy, in November 2018, the Bank acquired a property on West Onondaga Street in Syracuse, which will be renovated and converted into another full-service banking location. We consider the Syracuse Southwest Corridor neighborhood, where this property is located, to be an under-banked area within our target marketplace and believe that this branch will qualify for various economic incentives under New York State's Banking Development District, or BDD, program. The BDD program is designed to encourage the establishment of bank branches in areas where there is a demonstrated need for additional banking services. The program was developed in recognition of the fact that banks play a critically important role in promoting individual wealth, community development, and revitalization. This property investment demonstrates Pathfinder Bank's firm commitment to servicing diverse economic areas within its geographic market.

Considerable architectural design and site optimization planning have been required for this property. In addition, there are a number of process complexities related to the BDD certification, potential historical building preservation tax credits and other potential public-money incentives. These complexities have extended the project timeline for opening this branch but will, in the view of management, significantly reduce the cost of renovating and operating the branch in the future. We plan to soon begin renovation work on the acquired facility and expect to open our new Syracuse Southwest branch office by the end of 2021.

- Increasing non-interest income. We have sought to reduce our dependence on net interest income by increasing fee-based income across a broad spectrum of loan and deposit products. We also seek to complimentary income for service activities related to those products. Certain significant information systems, marketing and product design initiatives were completed in the second half of 2019 that enabled the Company to more effectively understand and monitor its competitive environment for noninterest income opportunities. These initiatives were intended to assist the Company in better capturing noninterest income through improved product design and customer relationship optimization. Such changes to products and service suites required internal procedural modifications and training, computer systems updates in many cases, revised marketing materials and disclosure documents, as well as advance notice to customers. These changes were substantially completed by the end of the first quarter of 2020. While the Company has realized modestly increased revenues as a result of these initiatives, these increases have been muted, in some cases substantially, as a consequence of both reduced customer transactional activities and the extraordinary fee waiver policies, initiated by the Company's management, resulting from, and in response to, the COVID-19 pandemic. It is expected that the originally-anticipated increases in noninterest income, resulting from the completion of these initiatives, will ultimately be realized as the negative economic effects of the pandemic subside in the future.
- **Diversifying our products and services with a goal of increasing non-interest income over time.** We have also sought to increase the breath of services that we provide to our customers. We offer property and casualty and life insurance through our subsidiary, Pathfinder Risk Management Company, Inc., and its insurance agency subsidiary, the FitzGibbons Agency, LLC. Additionally, Pathfinder Bank's investment services provide brokerage services for purchasing stocks, bonds, mutual funds, annuities, and long-term care insurance products. We intend to gradually grow these businesses. We believe that

there will be opportunities to cross-sell these products to our deposit and loan customers which will increase our non-interest income over time.

- **Banking platform and technologies.** We have committed significant resources to establish a banking platform to accommodate future growth by upgrading our information technology, maintaining a robust risk management and compliance staff, improving credit administration functionality, and upgrading our physical infrastructure. We believe that these investments will enable us to achieve operational efficiencies with minimal additional investments, while providing increased convenience for our customers.
- **Controlling the rate of growth in operating expenses.** The Company has sought to reduce the rate of growth in its operating expenses relative to the rate of revenue growth and to thereby increase its overall profitability. Substantial new budgetary and expense control mechanisms were implemented during 2019 that management believes will accomplish this goal over time, beginning in 2020.
- *Managing capital*. The Company received \$24.9 million in net proceeds from the sale of approximately 2.6 million shares of common stock as a result of the Conversion in October 2014. In October 2015, the Company executed the issuance of the \$10.0 million non-amortizing Subordinated Loan and subsequently used those proceeds in February 2016 to substantially fund the full retirement of \$13.0 million in SBLF Preferred stock. The Company received \$19.6 million in net proceeds from the sale of 37,700 shares of common stock and 1,155,283 shares of preferred stock as a result of the Private Placement in May 2019. We have successfully leveraged this \$41.5 million in net new capital by growing our consolidated assets by \$532.8 million, or 95.0%, since the Conversion. It is our intent to balance our future growth with capital adequacy considerations in a manner that will continue to allow us to effectively serve all of our key stakeholders and maintain our "well capitalized" capital position.

Employees

As of June 30, 2020, the Bank had 161 full-time employees and 12 part-time employees. The employees are not represented by a collective bargaining unit and we consider our relationship with our employees to be good.

Market Area

We provide financial services to individuals, families, small to mid-size businesses and municipalities through our seven branch offices located in Oswego County, NY, three branch offices located in Onondaga County, NY and one limited purpose office located in Oneida County, NY. Our primary lending market area includes both Oswego and Onondaga Counties. However, our primary deposit generating area is concentrated in Oswego County and in the areas surrounding our Onondaga County branches.

The economies of Oswego County and Onondaga County are based primarily on manufacturing, energy production, heath care, education, and government. In addition to financial services, the broader Central New York market has a more diverse array of economic sectors, including food processing production and transportation. The region has more recently also developed particular strength in the commercialization of certain emerging technologies such as bio-processing, medical devices, aircraft systems and renewable energy.

Based on recent independent market survey reports, median home values were \$151,400 in Onondaga County and \$116,500 in Oswego County at the end of 2019. Home values have shown only modest increases in recent years within the Syracuse, NY metro area, including Onondaga and Oswego Counties. This modest increase in home values within the area followed a period in which home values within the area exhibited relative stability compared to many other areas of the country during the most recent economic recession that began in 2008.

Competition

Pathfinder Bank encounters strong competition both in attracting deposits and in originating real estate and other loans. Our most direct competition for deposits and loans comes from commercial banks, savings institutions and credit unions in our market area, including money-center banks such as JPMorgan Chase & Co. and Bank of America, regional banks such as M&T Bank and Key Bank N. A., and community banks such as NBT Bank and Community Bank N.A., all of which have substantially greater total assets than we do. Local credit unions, some of which also have more assets than the Company, are particularly strong competitors for consumer deposits and consumer loans. In addition, potential new competitors may be emerging that are generically defined as financial technology (also referred to as "FinTech" or "fintech") companies. These entities seek to employ new technology and various forms of innovation in order to compete with traditional methods of delivering financial services. The advanced use of smartphones for mobile banking, automated investing services and cryptocurrency are examples of such technologies. Financial technology companies consist of both well-capitalized startup entities, divisions of established financial institutions and/or established technology companies. These entities seek to replace or supplement the financial services provided by established financial service entities, such as the Company. Many established financial institutions are now implementing, or planning to implement, various forms of fintech solutions and technologies in order to broaden their product and service offerings and/or to gain improved competitive positions in this emerging marketplace. Some of these technologies either have been implemented to varying degrees by the Bank, or will be available to the Bank for future implementation through its network of service providers and computer system vendors. It cannot be predicted with certainty at this time how effective these new competitors will be in our marketplace or w

Our primary focus is to build and develop profitable consumer and commercial customer relationships while maintaining our role as a community bank. We compete for deposits by offering depositors a high level of personal service, a wide range of competitively-priced financial services, and a well distributed network of branches, ATMs, and electronic banking. We compete for loans through our competitive pricing, our experienced and active loan officers, local knowledge of our market and local decision making, strong community support and involvement, and a highly reputable brand. As the economy has improved in recent years, and loan demand has increased, competition from financial institutions for commercial and residential loans has also increased. Additionally, some of our competitors offer products and services that we do not offer, such as trust services and private banking.

As of June 30, 2020, based on the most recently-available FDIC data, we had the largest market share in Oswego County, representing 47.6% of all deposits, and we additionally held 1.8% of all deposits in Onondaga County. In addition, when combining both Oswego and Onondaga Counties, we have the fifth largest market share of sixteen institutions, representing 6.8% of the total market.

Lending Activities

General

Our primary lending activity is originating commercial real estate and commercial loans, the vast majority of which have periodically adjustable rates of interest, and one-to-four family residential real estate loans, the majority of which have fixed rates of interest. Our loan portfolio also includes municipal loans, home equity loans and lines and consumer loans. In order to diversify our loan portfolio, increase our revenues, and make our loan portfolio less interest rate sensitive, the Company has actively sought to increase its commercial real estate and commercial business lending activities, consistent with safe and sound underwriting practices. Accordingly, we offer adjustable-rate commercial mortgage loans, short-and medium-term mortgage loans, and floating rate commercial loans and lines of credit.

Commercial Real Estate Loans

Over the past several years, we have focused on originating commercial real estate loans, and we believe that commercial real estate loans will continue to provide growth opportunities for us. We expect to increase, subject to our underwriting standards and market conditions, this business line in the future with a target loan size of \$500,000 to \$2.0 million to small businesses and real estate projects in our market area. Commercial real estate loans are secured by properties such as multi-family residential, office, retail, warehouse and owner-occupied commercial properties.

Our commercial real estate underwriting policies provide that such real estate loans are typically made in amounts up to 80% of the appraised value of the property. Commercial real estate loans are offered with interest rates that are generally fixed for up to three or five years then are adjustable based on the FHLBNY advance rate. Contractual maturities generally do not exceed 20 years. In reaching a decision whether to make a commercial real estate loan, we consider market conditions, operating trends, net cash flows of the property, the borrower's expertise and credit history, and the appraised value of the underlying property. We will also consider the terms and conditions of the leases and the stability of the tenant base. We generally require that the properties securing these real estate loans have debt service coverage ratios (the ratio of earnings before interest, taxes, depreciation and amortization divided by interest expense and current maturities of long term debt) of at least 120%. Environmental due diligence is generally conducted for commercial real estate loans. Typically, commercial real estate loans made to corporations, partnerships and other business entities require personal guarantees by the owners of 20% or more of the borrowing entity.

A commercial real estate borrower's financial condition is monitored on an ongoing basis by requiring current financial statements, rent rolls, payment history reviews, property inspections and periodic face-to-face meetings with the borrower. We generally require borrowers with aggregate outstanding balances exceeding \$100,000 to provide annual updated financial statements and/or federal tax returns. These requirements also apply to all guarantors on these loans.

Loans secured by commercial real estate generally have greater credit risk than one-to-four family residential real estate loans. The increased credit risk associated with commercial real estate loans is a result of several factors, including larger loan balances concentrated with a limited number of borrowers, the impact of local and general economic conditions on the borrower's ability to repay the loan. Furthermore, the repayment of loans secured by commercial real estate properties typically depends upon the successful operation of the real property securing the loan. If the cash flows from the property are reduced, the borrower's ability to repay the loan may be impaired. However, commercial real estate loans generally have higher interest rates than loans secured by one-to-four family residential real estate.

Commercial Loans

We typically originate commercial loans, including commercial term loans and commercial lines of credit, on the basis of a borrower's ability to make repayment from the cash flows of the borrower's business, conversion of current assets in the normal course of business (for seasonal working capital lines), the industry and market in which they operate, experience and stability of the borrower's management team, earnings projections and the underlying assumptions, and the value and marketability of any collateral securing the loan. As a result, the availability of funds for the repayment of commercial loans and commercial lines of credit is substantially dependent on the success of the business itself and the general economic environment in our market area. Therefore, commercial loans and commercial lines of credit that we originate have greater credit risk than one-to-four family residential real estate loans.

Commercial term loans are typically secured by equipment, furniture and fixtures, inventory, accounts receivable or other business assets, or, in some circumstances, such loans may be unsecured. From time to time, we also originate commercial loans that are guaranteed by the United States Small Business Administration

("SBA") or United States Department of Agriculture ("USDA") loan programs. In 2020, the Bank did participate in the SBA's Paycheck Protection Program as further described below. Over the past several years, we have focused on increasing our commercial lending and our business strategy is to continue to increase our originations of commercial loans to small businesses in our market area, subject to our underwriting standards and market conditions. Our commercial loans are generally comprised of adjustable-rate loans, indexed to the prime rate, with terms consisting of three to seven years, depending on the needs of the borrower and the useful life of the underlying collateral. We make commercial loans to businesses operating in our market area for purchasing equipment, property improvements, business expansion or working capital. If a commercial loan is secured by equipment, the maturity of a term loan will depend on the useful life of the equipment purchased, the source of repayment for the loan and the purpose of the loan. We generally obtain personal guarantees on our commercial loans.

Our commercial lines of credit are typically adjustable rate lines, indexed to the prime interest rate. Generally, our commercial lines of credit are secured by business assets or other collateral, and generally payable on-demand pursuant to an annual review. Since the commercial lines of credit may expire without being drawn upon, the total committed amounts do not necessarily represent future cash requirements.

Residential Real Estate Loans

Historically, our primary lending focus consisted of originating one-to-four family, owner-occupied residential mortgage loans, substantially all of which were secured by properties located in our market area. As noted above, we have shifted our lending focus in recent years towards originating more commercial real estate and commercial loans.

We currently offer one-to-four family residential real estate loans with terms up to 30 years that are generally underwritten according to Federal National Mortgage Association ("Fannie Mae") guidelines, and we refer to loans that conform to such guidelines as "conforming loans." We generally originate both fixed-rate and adjustable-rate mortgage loans in amounts up to the maximum conforming loan limits as established by the Federal Housing Finance Agency, which as of June 30, 2020, was generally \$510,400 for single-family homes in our market area.

A significant portion of our loan portfolio consists of fixed-rate one-to-four family residential real estate loans with terms in excess of 15 years. Prior to 2020, although conforming residential mortgage loans were generally saleable in the secondary market at management's discretion, we held our originated one-to-four family residential real estate loans in our portfolio. The ability to sell mortgages into the secondary market provides a potential source of liquidity and is a means of managing interest-rate risk. Mortgage loan sales in the secondary market were conducted on a limited basis in 2019 and 2018. During 2020, the Bank began to sell a substantially higher volume of its newly-originated residential mortgages than it had sold in prior years. These additional sales were made in response to the significantly increased mortgage loan application and closing volumes experienced in 2020 in comparison to prior years. This significant increase in mortgage applications and the amount of closed, originated residential mortgage loans, was due to increased customer demand for such loans following substantial declines in market interest rates. The Company elected to sell a portion of this increased residential mortgage loan origination volume as an integral part of its interest rate risk and liquidity management strategies. In addition, in the first half of 2020, the Company sold \$35.9 million of previously held-in-portfolio residential mortgage loans at a net gain of \$659,000. The sale was conducted in order to reduce the Bank's concentration in 30-year fixed-rate mortgages as part of the Company's overall interest rate risk management strategies. We also originate non-salable one-to-four family residential real estate loans secured by non-owner occupied properties. However, we generally do not make loans in excess of 80% loan-to-value on non-owner occupied properties.

For most owner-occupied one-to-four family residential real estate loans with loan-to-value ratios of between 80% and 95%, we require the borrower to obtain private mortgage insurance ("PMI"). Our lending policies limit the maximum loan-to-value ratio on both fixed-rate and adjustable-rate owner-occupied mortgage

loans to 80% of the appraised value of the collateralized property, with the exception of a limited use product which allows for loans up to 90% with no PMI. For first mortgage loan products, we require the borrower to obtain title insurance. We also require homeowners' insurance, fire and casualty, and, if necessary, flood insurance on properties securing real estate loans. We do not, and have never offered or invested in, one-to-four family residential real estate loans specifically designed for borrowers with sub-prime credit scores, including interest-only, negative amortization or payment option adjustable-rate mortgage loans.

Our fixed-rate one-to-four family residential real estate loans include loans that generally amortize on a monthly basis over periods between 10 to 30 years. Fixed-rate one-to-four family residential real estate loans often remain outstanding for significantly shorter periods than their contractual terms because borrowers have the right to refinance or prepay their loans.

Our adjustable-rate one-to-four family residential real estate loans generally consist of loans with initial interest rates fixed for one, three, or five years, and annual adjustments thereafter are indexed based on changes in the one-year United States Treasury bill constant maturity rate. Our adjustable-rate mortgage loans generally have an interest rate adjustment limit of 200 basis points per adjustment, with a maximum lifetime interest rate adjustment limit of 600 basis points. In the current low interest rate environment, we have not originated a significant amount of adjustable-rate mortgage loans. Although adjustable-rate one-to-four family residential real estate loans may reduce, to an extent, our vulnerability to changes in market interest rates because they periodically re-price, as interest rates increase the required payments due from a borrower also increase (subject to rate caps), thereby increasing the potential for default by the borrower. At the same time, the ability of the borrower to repay the loan and the marketability of the underlying collateral may be adversely affected by higher interest rates. Upward adjustments of the contractual interest rate are also limited by our maximum periodic and lifetime rate adjustments.

Residential Construction Loans

Our one-to-four family residential real estate loan portfolio also includes residential constructions loans. Our residential construction loans generally have initial terms of up to six months, subject to extension, during which the borrower pays interest only. Upon completion of construction, these loans typically convert to permanent loans secured by the completed residential real estate. Our construction loans generally have rates and terms comparable to residential real estate loans that we originate.

Tax-exempt Loans

We make loans to local governments and municipalities for either tax anticipation or for small expenditure projects, including equipment acquisitions and construction projects. Our municipal loans are generally fixed for a term of one year or less, and are generally unsecured. Interest earned on municipal loans is tax exempt for federal tax purposes, which enhances the overall yield on each loan. Generally, the municipality will have a deposit relationship with us along with the lending relationship.

We also make tax-exempt loans to commercial borrowers based on obligations issued by a state or local authority to provide economic development such as the state dormitory authority.

Home Equity Loans and Junior Liens

Home equity loans and junior liens are made up of lines of credit secured by owner-occupied and non-owner occupied one-to-four family residences and second and third real estate mortgage loans. Home equity loans and home equity lines of credit are generally underwritten using the same criteria that we use to underwrite one-to-four family residential mortgage loans. We typically originate home equity loans and home equity lines of credit on the basis of the applicant's credit history, an assessment of the applicant's ability to meet existing

obligations and payments on the proposed loan, and the value of the collateral securing the loan. Home equity loans are offered with fixed interest rates. Lines of credit are offered with adjustable rates, which are indexed to the prime rate, and with a draw period of up to 10 years and a payback period of up to 20 years. The loan-to-value ratio for our home equity loans is generally limited to 80% when combined with the first security lien, if applicable. The loan to value of our home equity lines of credit is generally limited to 80%, unless the Bank holds the first mortgage. If we hold the first mortgage, we will permit a loan to value of up to 90%, and we adjust the interest rate and underwriting standards to compensate for the additional risk.

For all first lien position mortgage loans, we use outside independent appraisers. For second position mortgage loans where we also hold the existing first mortgage, we will use the lesser of the existing appraisal amount used in underwriting the first mortgage or assessed value. For all other second mortgage loans, we will use a third-party service which gathers all data from real property tax offices and gives the property a low, middle and high value, together with similar properties for comparison. The middle value from the third-party service will be the value used in underwriting the loan. If the valuation method for the loan amount requested does not provide a value, or the value is not sufficient to support the loan request and it is determined that the borrower(s) are credit worthy, a full appraisal may be ordered.

Home equity loans and junior liens secured by junior mortgages have greater risk than one-to-four family residential mortgage loans secured by first mortgages. We face the risk that the collateral will be insufficient to compensate us for loan losses and costs of foreclosure, after repayment of the senior mortgages, if applicable. When customers default on their loans, we attempt to work out the relationship in order to avoid foreclosure because the value of the collateral may not be sufficient to compensate us for the amount of the unpaid loan and we may be unsuccessful in recovering the remaining balance from those customers. Moreover, decreases in real estate values could adversely affect our ability to fully recover the loan balance in the event of a default.

Consumer Loans

We are authorized to make loans for a variety of personal and consumer purposes and our consumer loan portfolio consists primarily of automobile, recreational vehicles and unsecured personal loans, as well as unsecured lines of credit and loans secured by deposit accounts. Our procedure for underwriting consumer loans includes an assessment of the applicant's credit history and ability to meet existing obligations and payments for the proposed loan, as well as an evaluation of the value of the collateral security, if any.

Consumer loans generally entail greater credit-related risk than one-to-four family residential mortgage loans, particularly in the case of loans that are unsecured or are secured by assets that tend to depreciate in value, such as automobiles. As a result, consumer loan collections are primarily dependent on the borrower's continuing financial stability and thus are more likely to be adversely affected by job loss, divorce, illness or personal bankruptcy. In these cases, repossessed collateral for a defaulted consumer loan may not provide an adequate source of repayment for the outstanding loan, and the remaining value often does not warrant further substantial collection efforts against the borrower.

The Company will invest from time to time in pools of collateralized consumer loans originated and serviced by financial institutions operating outside of the Company's primary market area. Third party-originated consumer loan pools are generally acquired primarily when, in the view of management, they offer superior risk vs. return characteristics to debt securities. Such pools will, in some instances, have projected economic advantages in terms of yield and/or other portfolio characteristics, such as interest rate risk sensitivity, superior to debt securities that would otherwise be purchased and are acquired to increase the overall performance characteristics of the Company's interest earning-asset portfolios viewed as a whole. Loans acquired through these transactions are required by the Company's internal policies to be underwritten to standards that are consistent with those of the Company's own underwriting guidelines and internal practices. Pre-purchase due diligence is performed that includes a thorough review of the originating institution's regulatory compliance procedures, underwriting practices and individual loan documentation. Since these pools are subject to borrower

credit default and are collateralized by out-of-market assets, the Company relies on the best efforts of the originating institution, acting as the loans' servicer, to collect on the loans within the pool and to mitigate losses due to such defaults. Such mitigation efforts include the orderly and timely liquidation of loan collateral, as necessary. Accordingly, such loan pools have both the credit risk typically associated with consumer loans and servicer risk components that are carefully monitored by the Company on an ongoing basis.

Loan Originations, Purchases, Sales and Servicing

We benefit from a number of sources for our loan originations, including real estate broker referrals, existing customers, borrowers, builders, attorneys, and "walk-in" customers. Our loan origination activity may be affected adversely by a rising interest rate environment which may result in decreased loan demand. Other factors, such as the overall health of the local economy and competition from other financial institutions, can also impact our loan originations. Although we originate both fixed-rate and adjustable-rate loans, our ability to generate each type of loan depends upon borrower demand, market interest rates, borrower preference for fixed-rate versus adjustable-rate loans, and the interest rates offered on each type of loan by other lenders in our market area. These lenders include commercial banks, savings institutions, credit unions, and mortgage banking companies that also actively compete for local real estate loans. Accordingly, the volume of loan originations may vary from period to period.

The majority of the fixed rate residential loans that are originated each year meet the underwriting guidelines established by Fannie Mae. While infrequent, in the past, we have sold residential mortgage loans in the secondary market, and we may do so in the future, although we continue to service loans once they are sold.

From time to time, although infrequent, we may purchase commercial real estate loan participations in which we are not the lead lender. In these circumstances, we follow our customary loan underwriting and approval policies. We also have participated out portions of commercial and commercial real estate loans that exceeded our loans-to-one borrower legal lending limit and for purposes of risk diversification.

In recent years, the Bank has occasionally purchased broadly-diversified pools of essentially homogenous loans from originators outside of the Bank's market area. These originators generally specialize in loan types, such as consumer loans, other than those loan types that the Bank specializes in. These loans, which are generally relatively short in duration, are acquired to provide supplementary interest income as well as to provide improvements to the Bank's overall asset/liability mix, particularly with respect to interest rate risk. Third party-originated loan pools are acquired primarily when, in the view of management, they offer superior risk vs. return characteristics to debt securities. Such loans are generally acquired through the facilitation of third-party brokerages and are serviced in perpetuity by the originating entries or their designees. Funding for loan purchases of this type is generally obtained through incremental usage of brokered deposits and/or other forms of borrowed funds.

At June 30, 2020, the Bank held nine pools of loans originated by six unaffiliated third-party lenders with an aggregate amortized historical cost of \$80.8 million. No new loan pools were acquired in 2020 as of June 30, 2020. Purchased loans have certain credit risk profiles distinct from those of the Bank's self-originated portfolio, most especially the portion of the purchased loans that are classified as unsecured consumer loans. At June 30, 2020, the Bank held \$22.3 million, \$19.3 million and \$6.1 million in purchased pooled loans secured by automobiles, residential real estate and commercial and industrial collateral, respectively. These purchased pools of loans totaled \$47.7 million on that date. In addition, the Bank held \$33.1 million in unsecured purchased consumer loans at June 30, 2020. All loans within these pools were considered to be performing at June 30, 2020.

At December 31, 2019 the Bank held nine pools of loans originated by six unaffiliated third-party lenders with an aggregate amortized historical cost of \$97.1 million. Of these totals, \$89.1 million in aggregate amortized historical cost relates to seven loan pools acquired in 2019. Purchased loans have certain credit risk profiles distinct from those of the Bank's self-originated portfolio, most especially the portion of the purchased loans that

are classified as unsecured consumer loans. At December 31, 2019, the Bank held \$27.2 million, \$22.2 million and \$6.6 million in purchased pooled loans secured by automobiles, residential real estate and commercial & industrial collateral, respectively. These purchased pools of loans totaled \$56.0 million on that date. In addition, the Bank held \$41.1 million in unsecured purchased consumer loans at December 31, 2019. All loans within these pools were considered to be performing at December 31, 2019.

The purchased pools of loans were subject to prepurchase analyses led by a team of the Bank's senior executives and credit analysts. In each case, the Bank's analytical processes considered the types of loans being evaluated, the underwriting criteria employed by the originating entity, the historical performance of such loans, especially in the most recent deeply recessionary environments, the collateral enhancements and other credit loss mitigation factors offered by the seller and the capabilities and financial stability of the servicing entities involved. In the view of management, from a credit risk perspective, these loan pools also benefit from broad diversification, including wide geographic dispersion, the readily-verifiable historical performance of similar loans issued by the originators, as well as the overall experience and skill of the underwriters and servicing entities involved as counterparties to the Bank in these transactions. In addition, these loan pools generally have significant underlying loan collateral and/or one or more of the following forms of credit enhancement: (1) contractual rights of loan substitution in the event of individual loan defaults, (2) retention of a portion of the principal amount of each loan by the seller, or (3) contractually-specified credit enhancement reserves accumulated from the collected cash flows generated by borrowers' repayment activities in excess of those cash flows due to the Bank. Management believes that the substantial level of diversification within these loan pools and the presence of other mitigation factors, specific to each of the acquired pools in varying degrees, provides significant overall reduction of the potential credit risks inherent in these purchases. The performance of all purchased loan pools are monitored regularly from detailed reports and remittance reconciliations provided at least monthly by the servicing entities.

Loan Approval Procedures and Authority

The Bank's lending activities follow written, non-discriminatory underwriting standards and loan origination procedures established by management and the board of directors. Our policies are designed to provide loan officers with guidelines on acceptable levels of risk, given a broad range of factors. The loan approval process is intended to assess the borrower's ability to repay the loan, the viability of the loan and the adequacy of the value of the collateral that will secure the loan, if applicable.

The board of directors grants loan officers individual lending authority to approve extensions of credit. The level of authority for loan officers varies based upon the loan type, total relationship, form of collateral and risk rating of the borrower. Each loan officer is charged with the responsibility of achieving high credit standards. Individual lending authority can be increased, suspended or removed by the board of directors, as recommended by the President or Executive Vice President and Chief Banking Officer.

If a loan is in excess of any individual loan officer's lending authority, the extension of credit must be referred to the Officer Loan Committee ("OLC"). The OLC is comprised of the President (serving as chairman), the Executive Vice President and Chief Banking Officer (serving as chair in the absence of the President), the Executive Vice President, Chief Operating Officer, as well as other members of the management team and retail and commercial lenders as may be appointed by the President. The OLC has authority to approve all commercial loans, and one-to-four family residential real estate loans where the total related credit is \$1.2 million or less which are not within the lenders' individual authority. In addition, the OLC may approve all municipal loans, where the total related credit is \$2.5 million or less, and the individual loan amount is \$2.5 million or less for rated municipal loans, and \$1.5 million for unrated credits. The OLC has the authority to approve all consumer loans where the total related credit is \$2.5 million or less and the individual loan amount is \$200,000 for unsecured loans or \$750,000 for secured loans. The Executive Loan Committee, which consists of members of the Bank's board of directors, must approve all extensions of credit in excess of the limits for the OLC and lenders individual authority.

Loans to One Borrower

Under New York law, New York commercial banks are subject to loans-to-one borrower limits, which are substantially similar as those applicable to national banks, which generally restrict loans to one borrower to an amount equal to 15% of unimpaired capital and unimpaired surplus, which was \$15.9 million at June 30, 2020 and \$14.3 million at December 31, 2019, on an unsecured basis, and an additional amount equal to 10% of unimpaired capital and unimpaired surplus, which was \$10.6 million at June 30, 2020 and \$9.5 million at December 31, 2019, if the loan is secured by readily marketable collateral (generally, financial instruments and bullion, but not real estate), subject to exceptions.

Additionally, our internal loan policies limit the total related credit to be extended to any one borrower (after application of the rules of attribution), with respect to any and all loans with the Bank to 10% of tier 1 and 2 capital, subject to certain exceptions. The indebtedness includes all credit exposure whether direct or contingent, used or unused.

Asset Quality

Loan Delinquencies and Collection Procedures

When a loan becomes delinquent, we make attempts to contact the borrower to determine the cause of the delayed payments and seek a solution to permit the loan to be brought current within a reasonable period of time. The outcome can vary with each individual borrower. In the case of mortgage loans and consumer loans, a late notice is sent 15 days after an account becomes delinquent. If delinquency persists, notices are sent at the 30 day delinquency mark, the 45 day delinquency mark and the 60 day delinquency mark. We also attempt to establish telephone contact with the borrower early on in the process. In the case of residential mortgage loans, included in every late notice is a letter that includes information regarding homeownership counseling. As part of a workout agreement, we will accept partial payments during the month in order to bring the account current. If attempts to reach an agreement are unsuccessful and the customer is unable to comply with the terms of the workout agreement, we will review the account to determine if foreclosure is warranted, in which case, consistent with New York law, we send a 90 day notice of foreclosure and then a 30 day notice before legal proceedings are commenced. A consumer final demand letter is sent in the case of a consumer loan. In the case of commercial loans and commercial mortgage loans, we follow a similar notification practice with the exception of the previously mentioned information on homeownership counseling. In addition, commercial loans do not require 90 day notices of foreclosure. Generally, commercial borrowers only receive 10 day notices before legal proceedings can be commenced. Commercial loans may experience longer workout times that may trigger a need for a loan modification that could meet the requirements of a troubled debt restructured loan.

Impaired Loans, Non-performing Loans and Troubled Debt Restructurings

The policy of the Bank is to provide a continuous assessment of the quality of its loan portfolio through the maintenance of an internal and external loan review process. The process incorporates a loan risk grading system designed to recognize degrees of risk on individual commercial and mortgage loans in the portfolio. Management is responsible for monitoring of asset quality and risk grade designations, which are communicated to the board on a regular basis.

We generally cease accruing interest on our loans when contractual payments of principal or interest have become 90 days past due or management has serious doubts about further collectability of principal or interest, even though the loan is currently performing. A loan may remain on accrual status if it is in the process of collection and is either guaranteed or well secured. When a loan is placed on non-accrual status, unpaid interest credited to income is reversed. Interest received on non-accrual loans generally is applied against principal or interest if it is recognized on the cash basis method. Generally, loans are restored to accrual status when the obligation is brought current, has performed in accordance with the contractual terms for a reasonable period of time, generally for a minimum of six months, and the ultimate collectability of the total contractual principal and interest is no longer in doubt.

Our Allowance for Loan and Lease Losses policy ("ALLL") establishes criteria for selecting loans to be measured for impairment based on the following:

Residential and Consumer Loans:

- All loans rated substandard or worse, on nonaccrual, and above our total related credit ("TRC") threshold balance of \$300,000.
- All Troubled Debt Restructured Loans

Commercial Lines and Loans, Commercial Real Estate and Tax-exempt loans:

- All loans rated substandard or worse, on nonaccrual, and above our TRC threshold balance of \$100,000.
- All Troubled Debt Restructured Loans

Impairment is measured by determining the present value of expected future cash flows or, for collateral-dependent loans, the fair value of the collateral adjusted for market conditions and selling expenses as compared to the loan carrying value.

Troubled Debt Restructurings ("TDR")

TDRs are loan restructurings in which we, for economic or legal reasons related to an existing borrower's financial difficulties, grant a concession to the debtor that we would not otherwise consider. Typically, a troubled debt restructuring involves a modification of terms of debt, such as reduction of the stated interest rate for the remaining original life of the debt, extension of the maturity date at a stated interest rate lower than the current market rate for new debt with similar risk, reduction of the face amount of the debt, or reduction of accrued interest. We consider modifications only after analyzing the borrower's current repayment capacity, evaluating the strength of any guarantors based on documented current financial information, and assessing the current value of any collateral pledged. These modifications are made only when there is a reasonable and attainable workout plan that has been agreed to by the borrower and that is in our best interests. Some examples of residential TDRs include restructures encouraged by the Federal Government's HAMP and HARP Programs, in which we have participated. See "Supervision and Regulation – The Coronavirus Aid, Relief and Economic Security Act" below for how TDRs have recently been modified in connection with the COVID-19 pandemic.

Loans on non-accrual status at the date of modification are initially classified as non-accrual troubled debt restructurings. Our policy provides that troubled debt restructured loans are returned to accrual status after a period of satisfactory and reasonable future payment performance under the terms of the restructuring. Satisfactory payment performance is generally no less than six consecutive months of timely payments and demonstrated ability to continue to repay.

Foreclosed real estate

Fair values for foreclosed real estate are initially recorded based on market value evaluations by third parties, less costs to sell ("initial cost basis"). Any write-downs required when the related loan receivable is exchanged for the underlying real estate collateral at the time of transfer to foreclosed real estate are charged to the allowance for loan losses. Values are derived from appraisals of underlying collateral or discounted cash flow analysis. Subsequent to foreclosure, valuations are updated periodically and assets are marked to current fair value, not to exceed the initial cost basis. In the determination of fair value subsequent to foreclosure, management also considers other factors or recent developments, such as, changes in absorption rates and market conditions from the time of valuation, and anticipated sales values considering management's plans for disposition. Either change could result in adjustment to lower the property value estimates indicated in the appraisals. Loan delinquencies together with properties within our Foreclosed Real Estate portfolio are reviewed monthly by the board of directors.

Classified Assets

Federal regulations provide for the classification of loans and other assets, such as debt and equity securities considered by the FDIC to be of lesser quality, as "substandard," "doubtful" or "loss." An asset is considered "substandard" if it is inadequately protected by the current net worth and paying capacity of the obligor or of the collateral pledged, if any. "Substandard" assets include those characterized by the "distinct possibility" that the insured institution will sustain "some loss" if the deficiencies are not corrected. Assets classified as "doubtful" have all of the weaknesses inherent in those classified "substandard," with the added characteristic that the weaknesses present make "collection or liquidation in full," on the basis of currently existing facts, conditions, and values, "highly questionable and improbable." Assets classified as "loss" are those considered "uncollectible" and of such little value that their continuance as assets without the establishment of a specific allowance for loan losses is not warranted. Assets that do not currently expose the insured institution to sufficient risk to warrant classification in one of the aforementioned categories but possess weaknesses are designated as "special mention" by our management.

When an insured institution classifies problem assets as either substandard or doubtful, it may establish general allowances in an amount deemed prudent by management to cover losses that are both probable and reasonable to estimate. General allowances represent allowances which have been established to cover accrued losses associated with lending activities that are both probable and reasonable to estimate, but which, unlike specific allowances, have not been allocated to particular problem assets. When an insured institution classifies problem assets as "loss," it is required either to establish a specific allowance for losses equal to 100% of that portion of the asset so classified or to charge-off such amount. An institution's determination as to the classification of its assets and the amount of its valuation allowances is subject to review by the regulatory authorities, which may require the establishment of additional general or specific allowances.

In connection with the filing of our periodic regulatory reports and in accordance with our classification of assets policy, we continuously assess the quality of our loan portfolio and we regularly review the loans in our loan portfolio to determine whether any loans require classification in accordance with applicable regulations. Loans are listed on the "watch list" initially because of emerging financial weaknesses even though the loan is currently performing in accordance with its terms, or delinquency status, or if the loan possesses weaknesses although currently performing. Management reviews the status of our loan portfolio delinquencies, by loan types, with the full board of directors on a monthly basis. Individual classified loan relationships are discussed as warranted. If a loan deteriorates in asset quality, the classification is changed to "special mention," "substandard," "doubtful" or "loss" depending on the circumstances and the evaluation. Generally, loans 90 days or more past due are placed on nonaccrual status and classified "substandard."

We also employ a risk grading system for our loans to help assure that we are not taking unnecessary and/or unmanageable risk. The primary objective of the loan risk grading system is to establish a method of assessing credit risk to further enable management to measure loan portfolio quality and the adequacy of the allowance for loan losses. Further, we contract with an external loan review firm to complete a credit risk assessment of the loan portfolio on a regular basis to help determine the current level and direction of our credit risk. The external loan review firm communicates the results of their findings to the Executive Loan Committee in writing and by periodically attending the Executive Loan Committee meetings. Any material issues discovered in an external loan review are also communicated immediately to the President of the Bank.

Allowance for Loan Losses

The allowance for loan losses represents management's estimate of losses inherent in the loan portfolio as of the date of the statement of condition and it is recorded as a reduction of loans. The allowance for loan losses is maintained at a level considered adequate to provide for losses that can be reasonably anticipated. Management performs a quarterly evaluation of the adequacy of the allowance. The allowance is increased by the provision for loan losses, and decreased by charge-offs, net of recoveries. Loans deemed to be uncollectible are charged

against the allowance for loan losses, and subsequent recoveries, if any, are credited to the allowance. All or part of the principal balance of loans receivable are charged off to the allowance as soon as it is determined that the repayment of all or part of the principal balance is highly unlikely. Non-residential consumer loans are generally charged off no later than 120 days past due on a contractual basis, unless productive collection efforts are providing results. Consumer loans may be charged off earlier in the event of bankruptcy, or if there is an amount that is deemed uncollectible. No portion of the allowance for loan losses is restricted to any individual loan type and the entire allowance is available to absorb any and all loan losses.

The allowance is based on three major components which are: (i) specific components for impaired loans, (ii) recent historical losses and several qualitative factors applied to a general pool of loans, and (iii) an unallocated component. The first component is the specific allowance that relates to loans that are classified as impaired. For these loans, an allowance is established when the discounted cash flows or collateral value of the impaired loan are lower than the carrying value of the loan. A loan is considered impaired when, based on current information and events, it is probable that we will be unable to collect the scheduled payments of principal or interest when due according to the contractual terms of the loan agreement. Impairment is measured by either the present value of the expected future cash flows discounted at the loan's effective interest rate or the fair value of the underlying collateral if the loan is collateral dependent. The majority of our loans utilize the fair value of the underlying collateral. Factors considered by management in determining impairment include payment status, collateral value and the probability of collecting scheduled principal and interest payments when due. Loans that experience insignificant payment delays and payment shortfalls generally are not classified as impaired. Management determines the significance of payment delays and shortfalls on a case-by case basis, taking into consideration all of the circumstances surrounding the loan and the borrower, including the length and reason for the delay, the borrower's prior payment record and the amount of shortfall in relation to what is owed.

The second component is the general allowance which covers pools of loans, by loan class, not considered impaired, smaller balance homogenous loans, such as residential real estate, home equity and other consumer loans. These pools of loans are evaluated for loss exposure based on historical loss rates for each of these categories of loans. The ratio of net charge-offs to loans outstanding within each loan class over the most recent eight quarters, lagged by one quarter, is used to generate the historical loss rates.

In addition, qualitative factors are added to the historical loss rates in arriving at the total allowance for loan losses needed for this general pool of loans. The qualitative factors include changes in national and local economic trends, the rate of growth in the portfolio, trends of delinquencies and nonaccrual balances, changes in loan policy, and changes in lending management experience and related staffing. Each factor is assigned a value to reflect improving, stable or declining conditions based on management's best judgment using relevant information available at the time of the evaluation. These qualitative factors, applied to each product class, make the evaluation inherently subjective, as it requires material estimates that may be susceptible to significant revision as more information becomes available.

The third component may consist of an unallocated allowance which is maintained to cover uncertainties that could affect management's estimate of probable losses. The unallocated component of the allowance, when present, reflects an additional margin for potential imprecision inherent in the underlying assumptions used in the methodologies for estimating specific and general losses in the portfolio. This component would typically be appropriate in times of significant economic dislocations or uncertainties in either, or both, the local and national economies. The unallocated allowance generally comprises less than 10% of the total allowance for loan losses and can be as little as 0% of total allowance.

When a loan is determined to be impaired, we will reevaluate the collateral which secures the loan. For real estate loans, we will obtain a new appraisal or broker's opinion, whichever is considered to provide the most accurate value in the event of sale. An evaluation of equipment held as collateral will be obtained from an independent firm able to provide such an evaluation. Collateral will be inspected not less than annually for all impaired loans and will be reevaluated not less than every two years. Appraised values are discounted to arrive at

the estimated selling price of the collateral, which is considered to be the estimated fair value. The discounts also include estimated costs to sell the property. For commercial and industrial loans secured by non-real estate collateral, such as accounts receivable, inventory and equipment, estimated fair values are determined based on the borrower's financial statements, inventory reports, accounts receivable agings or equipment appraisals or invoices. Indications of value from these sources are generally discounted based on the age of the financial information or the quality of the assets.

Large groups of homogeneous loans, including purchased loans, are evaluated for impairment in the aggregate. Accordingly, we do not separately identify individual residential mortgage loans with outstanding principal balances less than \$300,000, home equity and other consumer loans for impairment disclosures. We make exceptions to this general rule when such loans are (1) rated substandard or worse, on nonaccrual status and are related to borrowers with total related credit exposure in excess of our threshold balance of \$300,000; or (2) the loans are subject to a troubled debt restructuring agreement. The projected credit losses related to purchased loan pools are evaluated prior to purchase and the performance of those loans against expectations are analyzed at least monthly. Over the life of the purchased loan pools, the allowance for loan losses is adjusted, through the provision for loan losses, for expected loss experience, over the projected life of the loans. The expected credit loss experience is determined at the time of purchase and is modified, to the extent necessary, during the life of the purchased loan pools. The Bank does not initially increase the allowance for loan losses on the purchase date of the loan pools.

In addition, the FDIC and NYSDFS, as an integral part of their examination process, periodically review our allowance for loan losses and may require us to recognize additions to the allowance based on their judgments about information available to them at the time of their examination, which may not be currently available to management. Based on management's comprehensive analysis of the loan portfolio, we believe the current level of the allowance for loan losses is adequate.

Investments and Hedging Activities

Our investment policy is established by the board of directors. Our investment policy dictates that investment decisions will be made based on the safety of the investment, liquidity requirements, potential returns, cash flow targets, and consistency with our interest rate risk management objectives. The Asset Liability Management Committee (the "ALCO") of the board of directors acts in the capacity of an investment committee and is responsible for overseeing our investment program and evaluating on an ongoing basis our investment policy and objectives. Our President, Chief Operating Officer and Chief Financial Officer have the authority to purchase and sell securities within specific guidelines established by the investment policy. All transactions are reviewed by the board of directors at its regular meetings.

The general objectives of the investment securities portfolio are to assist in the overall interest rate risk management of the Bank, while generating a reasonable rate of return consistent with the risk of purchased principal, provide a source of liquidity, and reduce our overall credit risk profile. We also purchase securities to provide necessary liquidity for day-to-day operations and when investable funds exceed loan demand. The effect that the proposed security purchase would have on our overall credit and interest rate risk profile and our risk-based equity ratios is also considered in evaluating the timing, mix and characteristics of investment security purchases.

All investment securities must meet regulatory guidelines and be permissible bank investments. Our investment securities include a broad range of debt securities issued by the United States Government and its agencies and sponsored enterprises, state and municipal governments and agencies, and corporations. The Company also invests in mortgage-backed securities issued or guaranteed by United States Government sponsored enterprises, collateralized mortgage obligations and similar debt securities issued by both government sponsored entities and private (non-governmental) issuers, and asset-backed securities that are generally issued by private entities. The Company invests primarily in debt securities but will from time to time also invest, within certain regulatory limits, in mutual funds and equity securities.

All securities purchased will be classified at the time of purchase as either held-to-maturity or available-for-sale. We do not maintain a trading account. Securities purchased with the intent and ability to hold until maturity will be classified as held-to-maturity. Securities placed in the held-to-maturity category will be accounted for at amortized cost.

Securities that do not qualify or are not categorized as held-to-maturity are classified as available-for-sale. This classification includes securities that may be sold in response to changes in interest rates, the security's prepayment risk, liquidity needs, the availability of and the yield on alternative investments, and funding sources and terms. These securities are reported at fair value, which is determined on a monthly basis. Unrealized gains and losses are reported as a separate component of capital, net of tax. The aggregate change in value of the portfolio is reported to the board of directors monthly.

The composition of the investment portfolio is substantially the same for securities classified as both held-to-maturity and available-for-sale, although the portion of the securities portfolio classified as available-for-sale generally has a higher concentration of shorter-term, highly liquid assets, such a U.S. Treasury securities. Such securities are held as part of the Bank's liquidity management programs. The Bank holds a significant portion of its investment securities in mortgage-backed securities and collateralized mortgage obligations (many, but not all of which are issued by government-sponsored enterprises) and direct federal government and federal agency obligations. Federal agency issuers include the Federal Farm Credit Bank, Federal Home Loan Bank, Federal National Mortgage Association ("Fannie Mae"), Federal Home Loan Mortgage Corporation ("Freddie Mac") and the Government National Mortgage Association ("Ginnie Mae"), among others. For a discussion on mortgage backed securities, see "Mortgage-Backed Securities and Collateralized Mortgage Obligations."

As part of our membership in the FHLBNY, we are required to maintain a dividend-earning investment in FHLBNY stock. This investment is classified separately from securities due to significant restrictions on sale or transfer of the stock.

Mortgage-Backed Securities and Collateralized Mortgage Obligations

We purchase mortgage-backed securities and collateralized mortgage obligations guaranteed by Fannie Mae, Freddie Mac and Ginnie Mae. In recent years, the Bank has also increased the level of its investments in mortgage-backed securities and collateralized mortgage obligations issued by private entities. These securities are generally senior tranches, and most often the most senior tranche, of multi-class issuances that provide substantial credit enhancements to their senior tranches and therefore reasonable, but not absolute, protection for the Bank from the risks of default. We invest in mortgage-backed securities and collateralized mortgage obligations to achieve positive interest rate spreads with minimal administrative expense, and to lower our credit risk through geographic diversification. These securities are generally relatively short in duration and therefore reduce the Bank's sensitivity to changes in interest rates. All privately issued mortgage-backed securities held by the Bank at June 30, 2020 were either rated at or above the lowest investment grade for credit quality by a nationally-recognized statistical rating organization (a "NRSRO") or were the most senior tranches of securitizations that were not rated by a NRSRO at the time of the securities' issuance. We regularly monitor the credit quality of this portfolio. At June 30, 2020, no securities held by the Bank in this category had been downgraded by a NRSRO.

Mortgage-backed securities and collateralized mortgage obligations are created by pooling mortgages and issuing a security with an interest rate which is less than the interest rate on the underlying mortgages. These securities typically represent a participation interest in a pool of single- or multifamily mortgages and certain types of commercial real estate loans, although we generally focus our investments on mortgage related securities backed by one-to-four family real estate loans. The issuers of such securities pool and resell the participation interests in the form of securities to investors such as the Bank, and in the case of government agency sponsored issues, guarantee the payment of principal and interest to investors. Mortgage-backed securities and

collateralized mortgage obligations generally yield less than the loans that underlie such securities because of the cost of payment guarantees, if any, and credit enhancements. These securities, which are most often fixed-rate, are usually substantially more liquid than individual mortgage loans.

Investments in collateralized mortgage obligations involve a risk that actual prepayments may differ from estimated prepayments over the life of the security, which may require adjustments to the amortization of any premium or accretion of any discount relating to such instruments, thereby changing the net yield on such securities. There is also reinvestment risk associated with the cash flows from such securities or if such securities are redeemed by the issuer. In addition, the market value of such securities may be adversely affected in a rising interest rate environment, particularly since vast majority our collateralized mortgage obligations have a fixed rate of interest. The relatively short weighted average remaining life of our collateralized mortgage obligation portfolio mitigates our potential risk of loss in a rising interest rate environment.

Asset-Backed Securities

We also purchase asset-backed securities issued by private entities. These securities typically represent a participation interest in a pool of non-mortgage loans. Asset-backed securities are created by pooling homogenous non-mortgage loans (such as unsecured consumer loans) and issuing a security with an interest rate which is less than the interest rate on the underlying loan notes. The issuers of such securities pool and resell the participation interests in the form of securities to investors such as the Bank. Asset-backed securities generally yield less than the loans that underlie such securities because of the cost of credit enhancements. These securities, which may be fixed or adjustable-rate are usually more substantially more liquid than individual loans.

The securities of the type the Bank typically invests in are collateralized by consumer loans or commercial business trade receivables and are generally senior tranches of multi-class issuances. These tranches are offered with substantial credit enhancements and therefore reasonable, but not absolute, protection for the Company from the risks of default. We invest in asset-backed securities to achieve positive interest rate spreads with minimal administrative expense, and to lower our credit risk through geographical and asset-type diversification. These securities are generally relatively short in duration and therefore reduce the Bank's sensitivity to changes in interest rates. All asset-backed securities held by the Bank at June 30, 2020 were either rated at or above the lowest investment grade for credit quality by a NRSRO or were the most senior tranches of securitizations that were not rated by a NRSRO at the time of the securities' issuance. We regularly monitor the underlying credit quality of this portfolio. At June 30, 2020, no securities held by the Bank in this category had been downgraded by a NRSRO.

Sources of Funds

General

Deposits have traditionally been our primary source of funds for use in lending and investment activities. We also rely on advances from the FHLBNY, the Certificates of Deposit Account Registry Service ("CDARS") provided by an independent third-party, Promontory Interfinancial Network, and other deposits acquired through unaffiliated third-party financial institutions as forms of brokered deposits. In addition to deposits and borrowings, we derive funds from scheduled loan payments, investment maturities, loan prepayments, retained earnings and income on interest-earning assets. While scheduled loan payments and income on interest-earning assets are relatively stable sources of funds, deposit inflows and outflows can vary widely and are influenced by prevailing market interest rates, economic conditions and competition from other financial institutions.

Deposits

A majority of our depositors are persons or businesses who work, reside or operate in Oswego and Onondaga Counties. We offer a variety of deposits, including checking, savings, money market deposit accounts,

and certificates of deposit. Deposit account terms vary, with the principal differences being the minimum balance required, the amount of time the funds must remain on deposit and the interest rate. We establish interest rates, maturity terms, service fees and withdrawal penalties on a periodic basis. Management determines the rates and terms based on rates paid by competitors, our need for funds or liquidity, overall growth goals and federal and state regulations. The flow of deposits is influenced significantly by general economic conditions, changes in interest rates and competition. The variety of deposit accounts that we offer allows us to be competitive in generating deposits and to respond with flexibility to changes in our customers' demands. We believe that deposits are a stable source of funds, but our ability to attract and maintain deposits at favorable rates will be affected by market conditions, including competition and prevailing interest rates. In addition, the Bank holds municipal deposits, which have been a more volatile source of funds.

The CDARS program is a form of a brokered deposit facility in which we have been a participant since 2009. In addition to offering depositors enhanced FDIC insurance coverage, being a participant in CDARS allows us to fund our balance sheet through the CDARS' One-Way Buy program. This program uses a competitive bid process for available deposits, at specified interest rate and maturity terms, up to a varying amount that is approximately \$50 million for any one weekly bidding session as of June 30, 2020. These deposits work well for us because of their weekly availability, coupled with their short-term duration, which allows us to more closely mirror our funding needs. We believe this arrangement is a viable source of funding provided that we maintain our "well-capitalized" status.

In addition, from time to time, the Bank will acquire larger blocks of brokered deposits, outside of the CDARS program, that are obtained from unaffiliated third-party financial institutions. These brokered deposits generally have modestly longer maturity dates than the CDARS deposits, can be acquired in more substantial block size, and generally have issuance rates similar to the CDARS program.

Brokered deposits are employed by the Bank's management to supplement the funding that the Bank obtains from customer deposits and other borrowings, principally from the FHLBNY, and are used to increase the overall efficiency of the Bank's funding mix. Management intends to continue to use brokered deposits in the future as an integral part of its overall funding strategies.

Borrowings

The Bank has a number of existing credit facilities available to it. At June 30, 2020, the Bank had existing lines of credit at FHLBNY, the Federal Reserve Bank ("FRB"), and two other correspondent banks. We obtain advances primarily from the FHLBNY utilizing the security of the common stock we own in the FHLBNY and qualifying residential mortgage loans as collateral, provided certain standards related to creditworthiness are met. These advances are made pursuant to several credit programs, each of which has its own interest rate and range of maturities. FHLBNY advances are generally available to meet seasonal and other withdrawals of deposit accounts and to permit increased lending.

Subordinated Loans

The Company has a non-consolidated subsidiary trust, Pathfinder Statutory Trust II, of which the Company owns 100% of the common equity. The Trust issued \$5,000,000 of 30-year floating rate Company-obligated pooled capital securities of Pathfinder Statutory Trust II ("Floating-Rate Debentures"). The Company borrowed the proceeds of the capital securities from its subsidiary by issuing floating rate junior subordinated deferrable interest debentures having substantially similar terms. The capital securities mature in 2037 and are treated as Tier 1 capital by the FDIC and the FRB. The capital securities of the trust are a pooled trust preferred fund of Preferred Term Securities VI, Ltd., with interest rates that reset quarterly, and are indexed to the 3-month London Interbank Offered Rate ("LIBOR)" plus 1.65%. These securities have a five-year call provision. The Company guarantees all of these securities.

As currently scheduled, The United Kingdom's Financial Conduct Authority ("FCA"), the organization responsible for regulating LIBOR, will cease publishing LIBOR indices at the end of 2021. The Alternative Reference Rates Committee (the "ARRC"), formed by the Federal Reserve Board and the Federal Reserve Bank of New York, has been charged with developing an alternative rate that will replace LIBOR in the United States (U.S. dollar-denominated LIBOR). The ARRC has identified the Secured Overnight Financing Rate ("SOFR") as the rate that represents best practice for use in U.S. dollar-denominated LIBOR derivatives and other financial contracts. Accordingly, SOFR currently represents the ARRC's preferred alternative to LIBOR. However, the replacement of LIBOR is a highly complex task due to the large number and aggregate magnitude of currently-outstanding LIBOR-based contracts, as well as the broad range of users of these indices. As a result, there are a number of significant objections to the adoption of the SOFR index that have been brought forth for consideration by a wide-range of entities. Management has analyzed the Company's aggregate exposure to instruments that are indexed to LIBOR (including the Company's acquired loan participations, fixed-income investments, hedging instruments and the Floating-Rate Debentures) and concluded that the adoption of SOFR, or another similar index that may ultimately be promulgated by the ARRC, will not materially impact the Company or the results of its operations.

The Company's equity interest in the trust subsidiary is included in other assets on the Company's financial statements. For regulatory reporting purposes, the Federal Reserve Board has indicated that the preferred securities will continue to qualify as Tier 1 Capital subject to previously specified limitations, until further notice. If regulators make a determination that Trust Preferred Securities can no longer be considered in regulatory capital, the securities become callable and the Company may redeem them.

On October 15, 2015, the Company executed a \$10.0 million non-amortizing Subordinated Loan with an unrelated third party that is scheduled to mature on October 1, 2025. The Company has the right to prepay the Subordinated Loan at any time after October 15, 2020 without penalty. The annual interest rate charged to the Company will be 6.25% through the maturity date of the subordinated loan. The Subordinated Loan is senior in the Company's credit repayment hierarchy only to the Company's common equity and preferred stock and, as a result, qualifies as Tier 2 capital for the Company for all future periods when applicable. The Company paid \$172,000 in origination and legal fees as part of this transaction. These fees will be amortized over the life of the Subordinated Loan through its first call date using the effective interest method. The effective cost of funds related to this transaction is 6.44% calculated under this method. Interest expense of \$325,000 was recorded in the six months ended June 30, 2020. Interest expense of \$650,000 and \$647,000 were recorded in the years ended December 31, 2019 and 2018, respectively.

Supervision and Regulation

General

Pathfinder Bank is a New York-chartered commercial bank and the Company is a Maryland corporation and a registered bank holding company. The Bank's deposits are insured up to applicable limits by the FDIC. The Bank is subject to extensive regulation by NYSDFS, as its chartering agency, and by the FDIC, its primary federal regulator and deposit insurer. The Bank is required to file reports with, and is periodically examined by, the FDIC and the NYSDFS concerning its activities and financial condition and must obtain regulatory approvals prior to entering into certain transactions, including, but not limited to, mergers with or acquisitions of other financial institutions. As a registered bank holding company, the Company is regulated by the Federal Reserve Board.

The regulatory and supervisory structure establishes a comprehensive framework of activities in which an institution can engage and is intended primarily for the protection of depositors and the deposit insurance funds, rather than for the protection of shareholders and creditors. The regulatory structure also gives the regulatory authorities extensive discretion in connection with their supervisory and enforcement activities and examination policies, including policies concerning the establishment of deposit insurance assessment fees, classification of

assets and establishment of adequate loan loss reserves for regulatory purposes. Any change in such regulatory requirements and policies, whether by the New York State legislature, the NYSDFS, the FDIC, the Federal Reserve Board or the United States Congress, could have a material adverse impact on the financial condition and results of operations of the Company and the Bank.

Set forth below is a summary of certain material statutory and regulatory requirements applicable to the Company and the Bank. The summary is not intended to be a complete description of such statutes and regulations and their effects on the Company and the Bank.

The Coronavirus Aid, Relief and Economic Security Act (the "CARES Act")

The CARES Act, which became law on March 27, 2020, provided over \$2 trillion to combat the coronavirus disease (COVID-19) and stimulate the economy. The law had several provisions relevant to financial institutions, including:

- Allowing institutions not to characterize loan modifications relating to the COVID-19 pandemic as a troubled debt restructuring and also allowing them to suspend the corresponding impairment determination for accounting purposes.
- An option to delay the implementation of the accounting standard for current expected credit losses (CECL) until the earlier of December 31, 2020 or when the President declares that the coronavirus emergency is terminated.
- The ability of a borrower of a federally backed mortgage loan (VA, FHA, USDA, Freddie and Fannie) experiencing financial hardship due, directly or indirectly, to the COVID-19 pandemic to request forbearance from paying their mortgage by submitting a request to the borrower's servicer affirming their financial hardship during the COVID-19 emergency. Such a forbearance will be granted for up to 180 days, which can be extended for an additional 180-day period upon the request of the borrower. During that time, no fees, penalties or interest beyond the amounts scheduled or calculated as if the borrower made all contractual payments on time and in full under the mortgage contract will accrue on the borrower's account. Except for vacant or abandoned property, the servicer of a federally backed mortgage is prohibited from taking any foreclosure action, including any eviction or sale action, for not less than the 60-day period beginning March 18, 2020.
- The ability of a borrower of a multi-family federally backed mortgage loan that was current as of February 1, 2020, to submit a request for forbearance to the borrower's servicer affirming that the borrower is experiencing financial hardship during the COVID-19 emergency. A forbearance will be granted for up to 30 days, which can be extended for up to two additional 30-day periods upon the request of the borrower. During the time of the forbearance, the multi-family borrower cannot evict or initiate the eviction of a tenant or charge any late fees, penalties or other charges to a tenant for late payment of rent. Additionally, a multi-family borrower that receives a forbearance may not require a tenant to vacate a dwelling unit before a date that is 30 days after the date on which the borrower provides the tenant notice to vacate and may not issue a notice to vacate until after the expiration of the forbearance.

Interagency Statement on Loan Modifications and Reporting for Financial Institutions Working with Customers Affected by the Coronavirus

On March 22, 2020, the federal banking agencies issued an interagency statement to provide additional guidance to financial institutions who are working with borrowers affected by COVID-19. The statement provided that agencies will not criticize institutions for working with borrowers and will not direct supervised institutions to automatically categorize all COVID-19 related loan modifications as TDRs. The agencies have confirmed with staff of the Financial Accounting Standards Board that short-term modifications made on a good faith basis in response to COVID-19 to borrowers who were current prior to any relief, are not TDRs. This

includes short-term (e.g., six months) modifications such as payment deferrals, fee waivers, extensions of repayment terms, or other delays in payment that are insignificant. Borrowers considered current are those that are less than 30 days past due on their contractual payments at the time a modification program is implemented.

The statement further provided that working with borrowers that are current on existing loans, either individually or as part of a program for creditworthy borrowers who are experiencing short-term financial or operational problems as a result of COVID-19, generally would not be considered TDRs. For modification programs designed to provide temporary relief for current borrowers affected by COVID-19, financial institutions may presume that borrowers that are current on payments are not experiencing financial difficulties at the time of the modification for purposes of determining TDR status, and thus no further TDR analysis is required for each loan modification in the program.

The statement indicated that the agencies' examiners will exercise judgment in reviewing loan modifications, including TDRs, and will not automatically adversely risk rate credits that are affected by COVID-19, including those considered TDRs.

In addition, the statement noted that efforts to work with borrowers of one- to-four family residential mortgages, where the loans are prudently underwritten, and not past due or carried on non-accrual status, will not result in the loans being considered restructured or modified for the purposes of their risk-based capital rules. With regard to loans not otherwise reportable as past due, financial institutions are not expected to designate loans with deferrals granted due to COVID-19 as past due because of the deferral.

The Paycheck Protection Program

The Paycheck Protection Program ("PPP") is a \$650 billion specialized low-interest loan program funded by the U.S. Treasury Department and administered through the SBA's 7(a) loan guaranty program. An eligible business could generally have applied for a PPP loan up to 2.5 times its average monthly "payroll costs" limited to a loan amount of \$10.0 million. The proceeds of the loan can be used for payroll (excluding individual employee compensation over \$100,000 per year), mortgage, interest, rent, insurance, utilities and other qualifying expenses. PPP loans have an interest rate of 1.0%, a two-year or five-year loan term to maturity, and principal and interest payments deferred until the lender receives the applicable forgiven amount or ten months after the period the business has used such funds. The SBA guarantees 100% of the PPP loans made to eligible borrowers. The entire principal amount of the borrower's PPP loan, including any accrued interest, is eligible to be reduced by the loan forgiveness amount under the PPP so long as employee and compensation levels of the business are maintained and 60% of the loan proceeds are used for payroll expenses, with the remaining 40% of the loan proceeds used for other qualifying expenses.

The Dodd-Frank Act

The Dodd-Frank Act significantly changed bank regulation and has affected the lending, investment, trading and operating activities of depository institutions and their holding companies. The Dodd-Frank Act created the Consumer Financial Protection Bureau with extensive powers to supervise and enforce consumer protection laws. The Consumer Financial Protection Bureau has broad rule-making authority for a wide range of consumer protection laws that apply to all banks and savings institutions, including the authority to prohibit "unfair, deceptive or abusive" acts and practices. Banks and savings institutions with \$10 billion or less in assets, such as Pathfinder Bank, continue to be examined by their applicable federal bank regulators. The Dodd-Frank Act also gave state attorneys general the ability to enforce applicable federal consumer protection laws.

The Dodd-Frank Act broadened the base for FDIC assessments for deposit insurance and permanently increased the maximum amount of deposit insurance to \$250,000 per depositor. The Dodd-Frank Act also, among other things, required originators of certain securitized loans to retain a portion of the credit risk, stipulated regulatory rate-setting for certain debit card interchange fees, repealed restrictions on the payment of

interest on commercial demand deposits and contained a number of reforms related to mortgage originations. The Dodd-Frank Act increased the ability of shareholders to influence boards of directors by requiring companies to give shareholders a non-binding vote on executive compensation and so-called "golden parachute" payments. The Dodd-Frank Act also directed the Federal Reserve Board to promulgate rules prohibiting excessive compensation paid to company executives, regardless of whether the company is publicly traded or not.

The Economic Growth, Regulatory Relief and Consumer Protection Act of 2018 (the "EGRRCPA")

On May 24, 2018, the EGRRCPA was enacted, which repealed or modified certain provisions of the Dodd-Frank Act and eased regulations on all financial institutions with the exception of the largest banks. The EGRRCPA's provisions include, among other items: (i) exempting banks with less than \$10 billion in assets from the ability-to-repay requirements for certain qualified residential mortgage loans held in portfolio; (ii) not requiring appraisals for certain transactions valued at less than \$400,000 in rural areas; (iii) exempting banks that originate fewer than 500 open-end and 500 closed-end mortgages from HMDA's expanded data disclosures; (iv) clarifying that, subject to various conditions, reciprocal deposits of another depository institution obtained using a deposit broker through a deposit placement network for purposes of obtaining maximum deposit insurance would not be considered brokered deposits subject to the FDIC's brokered-deposit regulations; (v) raising eligibility for the 18-month exam cycle from \$1 billion to banks with \$3 billion in assets; and (vi) simplifying capital calculations by requiring regulators to establish for institutions under \$10 billion in assets a community bank leverage ratio at a percentage not less than 8% and not greater than 10%; that such institutions may elect to replace the general applicable risk-based capital requirements for determining well-capitalized status. In addition, the law required the Federal Reserve Board to raise the asset threshold under its Small Bank Holding Company Policy Statement from \$1 billion to \$3 billion for bank or savings and loan holding companies that are exempt from consolidated capital requirements, provided that such companies meet certain other conditions such as not engaging in significant nonbanking activities.

New York Bank Regulation

Pathfinder Bank derives its lending, investment, branching and other authority primarily from the applicable provisions of New York State Banking Law and the regulations of the NYSDFS, as limited by federal laws and regulations. Under these laws and regulations, commercial banks, including Pathfinder Bank, may invest in real estate mortgages, consumer and commercial loans, certain types of debt securities, including certain corporate debt securities and obligations of federal, state and local governments and agencies, certain types of corporate equity securities and certain other assets. Under the statutory authority for investing in equity securities, a bank may invest up to 2% of its assets or 20% of its capital, whichever is less in exchange-registered corporate stock. Investment in the stock of a single corporation is limited to the lesser of 1% of the bank's assets or 15% of the Bank's capital. The Bank's authority to invest in equity securities is constrained by federal law, as explained later. Such equity securities must meet certain earnings ratios and other tests of financial performance. A bank may also exercise trust powers upon approval of the NYSDFS. Pathfinder Bank does not presently have trust powers.

New York State chartered banks may also invest in subsidiaries. A bank may use this power to invest in corporations that engage in various activities authorized for banks, plus any additional activities that may be authorized by the NYSDFS.

Furthermore, New York banking regulations impose requirements on loans which a bank may make to its executive officers and directors and to certain corporations or partnerships in which such persons have equity interests. These requirements include that (i) certain loans must be approved in advance by a majority of the entire board of directors and the interested party must abstain from participating directly or indirectly in voting on such loan, (ii) the loan must be on terms that are not more favorable than those offered to unaffiliated third parties, and (iii) the loan must not involve more than a normal risk of repayment or present other unfavorable features.

Under the New York State Banking Law, the Superintendent may issue an order to a New York State chartered banking institution to appear and explain an apparent violation of law, to discontinue unauthorized or unsafe practices and to keep prescribed books and accounts. Upon a finding by the NYSDFS that any director, trustee or officer of any banking organization has violated any law, or has continued unauthorized or unsafe practices in conducting the business of the banking organization after having been notified by the Superintendent to discontinue such practices, such director, trustee or officer may be removed from office after notice and an opportunity to be heard. The Bank does not know of any past or current practice, condition or violation that may lead to any proceeding by the Superintendent or the NYSDFS against the Bank or any of its directors or officers.

New York State Community Reinvestment Regulation

Pathfinder Bank is also subject to provisions of the New York State Banking Law which imposes continuing and affirmative obligations upon banking institutions organized in New York State to serve the credit needs of its local community ("NYCRA") which are substantially similar to those imposed by the Federal Community Reinvestment Act ("CRA"). Pursuant to the NYCRA, a bank must file copies of all federal CRA reports with the NYSDFS. The NYCRA requires the NYSDFS to make a written assessment of a bank's compliance with the NYCRA every 24 to 36 months, utilizing a four-tiered rating system and make such assessment available to the public. The NYCRA also requires the Superintendent to consider a bank's NYCRA rating when reviewing a bank's application to engage in certain transactions, including mergers, asset purchases and the establishment of branch offices or automated teller machines, and provides that such assessment may serve as a basis for the denial of any such application. Pathfinder Bank's NYCRA most recent rating, dated March 31, 2015, was "satisfactory."

Federal Regulations

Capital Requirements. Federal regulations require federally insured depository institutions to meet several minimum capital standards: a common equity Tier 1 capital to risk-based assets ratio of 4.5%, a Tier 1 capital to risk-based assets ratio of 6.0%, a total capital to risk-based assets of 8.0%, and a 4.0% Tier 1 capital to total assets leverage ratio. These capital requirements were effective January 1, 2015 and are the result of a final rule implementing recommendations of the Basel Committee on Banking Supervision and certain requirements of the Dodd-Frank Act.

In determining the amount of risk-weighted assets for purposes of calculating risk-based capital ratios, all assets, including certain off-balance sheet assets (e.g., recourse obligations, direct credit substitutes, residual interests) are multiplied by a risk weight factor assigned by the regulations based on the risks believed inherent in the type of asset. Higher levels of capital are required for asset categories believed to present greater risk. Common equity Tier 1 capital is generally defined as common stockholders' equity and retained earnings. Tier 1 capital is generally defined as common equity Tier 1 and additional Tier 1 capital. Additional Tier 1 capital includes certain noncumulative perpetual preferred stock and related surplus and minority interests in equity accounts of consolidated subsidiaries. Total capital includes Tier 1 capital (common equity Tier 1 capital plus additional Tier 1 capital) and Tier 2 capital. Tier 2 capital is comprised of capital instruments and related surplus, meeting specified requirements, and may include cumulative preferred stock and long-term perpetual preferred stock, mandatory convertible securities, intermediate preferred stock and subordinated debt. Also included in Tier 2 capital is the allowance for loan and lease losses limited to a maximum of 1.25% of risk-weighted assets and, for institutions that have exercised an opt-out election regarding the treatment of Accumulated Other Comprehensive Income, up to 45% of net unrealized gains on available-for-sale equity securities with readily determinable fair market values. Pathfinder Bank exercised the opt-out election. Calculation of all types of regulatory capital is subject to deductions and adjustments specified in the regulations. In assessing an institution's capital adequacy, regulators take into consideration, not only these numeric factors, but qualitative factors as well, and has the authority to establish higher capital requirements for individual institutions when and where deemed necessary.

In addition to establishing the minimum regulatory capital requirements, the regulations limit capital distributions and certain discretionary bonus payments to management personnel if the institution does not hold a "capital conservation buffer" consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets above the amount necessary to meet its minimum risk-based capital requirements. Notwithstanding the foregoing, pursuant to the EGRRCPA, during 2019, the FDIC finalized a rule that established a community bank leverage ratio ("CBLR"). The CBLR (Tier 1 capital to average consolidated assets) was established at 9% for institutions under \$10 billion in assets and such institutions may elect to utilize the CBLR threshold level of capital in lieu of the generally-applicable risk-based capital requirements under Basel III. Such institutions that meet the CBLR threshold and certain other qualifying criteria will automatically be deemed to be well-capitalized. The new rule took effect on January 1, 2020. Pursuant to the CARES Act, the federal banking agencies issued final rules to set the CBLR at 8% beginning in the second quarter of 2020 through the end of 2020. Beginning in 2021, the CBLR will increase to 8.5% for the calendar year. Community banks will have until January 1, 2022, before the CBLR requirement will return to 9%. A financial institution can elect to be subject to this new definition. The Bank did not elect to become subject to the CBLR.

Standards for Safety and Soundness. As required by statute, the federal banking agencies have adopted final regulations and Interagency Guidelines Establishing Standards for Safety and Soundness to implement safety and soundness standards. The guidelines set forth the safety and soundness standards that the federal banking agencies use to identify and address problems at insured depository institutions before capital becomes impaired. The guidelines address internal controls and information systems, internal audit systems, credit underwriting, loan documentation, interest rate exposure, asset growth, asset quality, earnings, compensation, fees and benefits and, more recently, safeguarding customer information. If the appropriate federal banking agency determines that an institution fails to meet any standard prescribed by the guidelines, the agency may require the institution to submit to the agency an acceptable plan to achieve compliance with the standard.

Business and Investment Activities. Under federal law, all state-chartered FDIC-insured banks, including commercial banks, have been limited in their activities as principal and in their equity investments to the type and the amount authorized for national banks, notwithstanding state law. Federal law permits certain exceptions to these limitations.

The FDIC is also authorized to permit state banks to engage in state authorized activities or investments not permissible for national banks (other than non-subsidiary equity investments) if they meet all applicable capital requirements and it is determined that such activities or investments do not pose a significant risk to the FDIC insurance fund. The FDIC has adopted regulations governing the procedures for institutions seeking approval to engage in such activities or investments. The Gramm-Leach-Bliley Act of 1999 specified that a state bank may control a subsidiary that engages in activities as principal that would only be permitted for a national bank to conduct in a "financial subsidiary," if a bank meets specified conditions and deducts its investment in the subsidiary for regulatory capital purposes.

Prompt Corrective Regulatory Action. Federal law requires, among other things, that federal bank regulatory authorities take "prompt corrective action" with respect to banks that do not meet minimum capital requirements. For these purposes, the law establishes five capital categories: well capitalized, adequately capitalized, undercapitalized, significantly undercapitalized and critically undercapitalized.

An institution is deemed to be "well capitalized" if it has a total risk-based capital ratio of 10.0% or greater, a Tier 1 risk-based capital ratio of 8.0% or greater, a leverage ratio of 5.0% or greater and a common equity Tier 1 ratio of 6.5% or greater. An institution is "adequately capitalized" if it has a total risk-based capital ratio of 8.0% or greater, a Tier 1 risk-based capital ratio of 6.0% or greater, a leverage ratio of 4.0% or greater and a common equity Tier 1 ratio of 4.5% or greater. An institution is "undercapitalized" if it has a total risk-based capital ratio of less than 8.0%, a Tier 1 risk-based capital ratio of less than 4.5%. An institution is deemed to be "significantly undercapitalized" if it has a total risk-based capital ratio of less

than 4.0%, a leverage ratio of less than 3.0% or a common equity Tier 1 ratio of less than 3.0%. An institution is considered to be "critically undercapitalized" if it has a ratio of tangible equity (as defined in the regulations) to total assets that is equal to or less than 2.0%. "Undercapitalized" banks must adhere to growth, capital distribution (including dividend) and other limitations and are required to submit a capital restoration plan. A bank's compliance with such a plan must be guaranteed by any company that controls the undercapitalized institution in an amount equal to the lesser of 5% of the institution's total assets when deemed undercapitalized or the amount necessary to achieve the status of adequately capitalized. If an "undercapitalized" bank fails to submit an acceptable plan, it is treated as if it is "significantly undercapitalized." "Significantly undercapitalized" banks must comply with one or more of a number of additional measures, including, but not limited to, a required sale of sufficient voting stock to become adequately capitalized, a requirement to reduce total assets, cessation of taking deposits from correspondent banks, the dismissal of directors or officers and restrictions on interest rates paid on deposits, compensation of executive officers and capital distributions by the parent holding company. "Critically undercapitalized" institutions are subject to additional measures including, subject to a narrow exception, the appointment of a receiver or conservator within 270 days after being designated "critically undercapitalized."

At June 30, 2020, Pathfinder Bank was well-capitalized.

Transactions with Related Parties. Transactions between a bank (and, generally, its subsidiaries) and its related parties or affiliates are limited by Sections 23A and 23B of the Federal Reserve Act. An affiliate of a bank is any company or entity that controls, is controlled by or is under common control with the bank. In a holding company context, the parent bank holding company ("BHC") and any companies which are controlled by such parent holding company are affiliates of the bank. Generally, Sections 23A and 23B of the Federal Reserve Act limit the extent to which the bank or its subsidiaries may engage in "covered transactions" with any one affiliate to 10% of such institution's capital stock and surplus and contain an aggregate limit on all such transactions with all affiliates to an amount equal to 20% of such institution's capital stock and surplus. The term "covered transaction" includes the making of loans, purchase of assets, issuance of a guarantee and similar transactions.

In addition, loans or other extensions of credit by the institution to the affiliate are required to be collateralized in accordance with specified requirements. The law also requires that affiliate transactions be on terms and conditions that are substantially the same, or at least as favorable to the institution, as those provided to non-affiliates.

Pathfinder Bank's authority to extend credit to its directors, executive officers and 10% shareholders, as well as to entities controlled by such persons, is currently governed by the requirements of Sections 22(g) and 22(h) of the Federal Reserve Act and Regulation O of the Federal Reserve Board. Among other things, these provisions generally require that extensions of credit to insiders:

- be made on terms that are substantially the same as, and follow credit underwriting procedures that are not less stringent than, those prevailing for comparable transactions with unaffiliated persons and that do not involve more than the normal risk of repayment or present other unfavorable features; and
- not exceed certain limitations on the amount of credit extended to such persons, individually and in the aggregate, which limits are based, in part, on the amount of Pathfinder Bank's capital.

In addition, extensions of credit in excess of certain limits must be approved by Pathfinder Bank's board of directors. Extensions of credit to executive officers are subject to additional limits based on the type of extension involved.

Enforcement. The FDIC has extensive enforcement authority over insured state banks, including Pathfinder Bank. That enforcement authority includes, among other things, the ability to assess civil money penalties, issue cease and desist orders and remove directors and officers. In general, enforcement actions may be initiated in

response to violations of laws and regulations and unsafe or unsound practices. The FDIC also has authority under federal law to appoint a conservator or receiver for an insured bank under certain circumstances. The FDIC is required, with certain exceptions, to appoint a receiver or conservator for an insured state non-member bank if the bank was "critically undercapitalized" on average during the calendar quarter beginning 270 days after the date on which the institution became "critically undercapitalized."

Federal Insurance of Deposit Accounts. The Dodd-Frank Act permanently increased the maximum amount of deposit insurance for banks, savings institutions and credit unions to \$250,000 per depositor.

The FDIC assesses insured depository institutions to maintain its Deposit Insurance Fund. Under the FDIC's risk-based assessment system, institutions deemed less risky pay lower assessments. Assessments for institutions of less than \$10 billion of assets are now based on financial measures and supervisory ratings derived from statistical modeling estimating the probability of failure of an institution's failure within three years. That technique, effective July 1, 2016, replaced the previous system under which institutions were placed into risk categories.

The Dodd-Frank Act increased the minimum target Deposit Insurance Fund ratio from 1.15% of estimated insured deposits to 1.35% of estimated insured deposits. The FDIC was required to seek to achieve the 1.35% ratio by September 30, 2020. The FDIC indicated that the 1.35% ratio was exceeded in November 2018. Insured institutions of less than \$10 billion of assets received credits for the portion of their assessments that contributed to the reserve ratio between 1.15% and 1.35%. The Dodd-Frank Act eliminated the 1.5% maximum fund ratio, instead leaving it to the discretion of the FDIC, and the FDIC has exercised that discretion by establishing a long-range fund ratio of 2%.

The FDIC has authority to increase insurance assessments. Any significant increase would have an adverse effect on the operating expenses and results of operations of Pathfinder Bank. Management cannot predict what assessment rates will be in the future.

Insurance of deposits may be terminated by the FDIC upon a finding that an institution has engaged in unsafe or unsound practices, is in an unsafe or unsound condition to continue operations or has violated any applicable law, regulation, rule, order or condition imposed by the FDIC. We do not currently know of any practice, condition or violation that may lead to termination of our deposit insurance.

Community Reinvestment Act ("CRA"). Under the CRA, a bank has a continuing and affirmative obligation, consistent with its safe and sound operation, to help meet the credit needs of its entire community, including low and moderate income neighborhoods. The CRA does not establish specific lending requirements or programs for financial institutions nor does it limit an institution's discretion to develop the types of products and services that it believes are best suited to its particular community. The CRA does require the FDIC, in connection with its examination of a bank, to assess the institution's record of meeting the credit needs of its community and to take such record into account in its evaluation of certain applications by such institution, including applications to establish or acquire branches and merger with other depository institutions. The CRA requires the FDIC to provide a written evaluation of an institution's CRA performance utilizing a four-tiered descriptive rating system. Pathfinder Bank's latest FDIC CRA rating, dated May 13, 2019, was "satisfactory."

Federal Reserve System. The Federal Reserve Board regulations require depository institutions to maintain non-interest-earning reserves against their transaction accounts (primarily negotiable order of withdrawal (NOW) and regular checking accounts). The regulations generally provide that reserves be maintained against aggregate transaction accounts as follows: a 3% reserve ratio is assessed on net transaction accounts up to and including \$127.5 million; a 10% reserve ratio is applied above \$127.5 million. The first \$16.9 million of otherwise reservable balances are exempted from the reserve requirements. The amounts are adjusted annually. For 2020, all reserve requirements have been reduced to 0%. Pathfinder Bank complies with the foregoing requirements.

Federal Home Loan Bank System. Pathfinder Bank is a member of the Federal Home Loan Bank System, which consists of twelve regional Federal Home Loan Banks. The Federal Home Loan Bank System provides a central credit facility primarily for member institutions as well as other entities involved in home mortgage lending. As a member of the FHLBNY, Pathfinder Bank is required to acquire and hold a specified amount of shares of capital stock in the FHLBNY. As of June 30, 2020, Pathfinder Bank was in compliance with this requirement.

Other Regulations

Interest and other charges collected or contracted for by Pathfinder Bank are subject to state usury laws and federal laws concerning interest rates. Pathfinder Bank's operations are also subject to federal laws applicable to credit transactions, such as the:

- Truth-In-Lending Act, governing disclosures of credit terms to consumer borrowers;
- Real Estate Settlement Procedures Act, requiring that borrowers for mortgage loans for one-to-four family residential real estate receive
 various disclosures, including good faith estimates of settlement costs, lender servicing and escrow account practices, and prohibiting
 certain practices that increase the cost of settlement services;
- The TILA-RESPA Integrated Disclosure Rule, commonly known as the TRID rule, which became effective on October 3, 2015. This rule
 amended the Truth in Lending Act and the Real Estate Settlement Procedures Act to integrate several consumer disclosures for mortgage
 loans;
- Home Mortgage Disclosure Act, requiring financial institutions to provide information to enable the public and public officials to determine whether a financial institution is fulfilling its obligation to help meet the housing needs of the community it serves;
- Equal Credit Opportunity Act, prohibiting discrimination on the basis of race, creed or other prohibited factors in extending credit;
- Fair Credit Reporting Act, governing the use and provision of information to credit reporting agencies;
- Fair Debt Collection Act, governing the manner in which consumer debts may be collected by collection agencies;
- Truth in Savings Act;
- Rules and regulations of the various federal agencies charged with the responsibility of implementing such federal laws;
- Right to Financial Privacy Act, which imposes a duty to maintain confidentiality of consumer financial records and prescribes procedures for complying with administrative subpoenas of financial records;
- Electronic Funds Transfer Act and Regulation E promulgated thereunder, which govern automatic deposits to and withdrawals from deposit accounts and customers' rights and liabilities arising from the use of automated teller machines and other electronic banking services:
- Check Clearing for the 21st Century Act (also known as "Check 21"), which gives "substitute checks," such as digital check images and copies made from that image, the same legal standing as the original paper check;
- USA PATRIOT Act, which requires banks operating to, among other things, establish broadened anti-money laundering compliance
 programs, due diligence policies and controls to ensure the detection and reporting of money laundering. Such required compliance
 programs are intended to supplement existing compliance requirements, also applicable to financial institutions, under the Bank Secrecy
 Act and the Office of Foreign Assets Control regulations; and
- Gramm-Leach-Bliley Act, which places limitations on the sharing of consumer financial information by financial institutions with unaffiliated third parties. Specifically, the Gramm-Leach-Bliley Act

requires all financial institutions offering financial products or services to retail customers to provide such customers with the financial institution's privacy policy and provide such customers the opportunity to "opt out" of the sharing of certain personal financial information with unaffiliated third parties.

Holding Company Regulation

The Company, as a bank holding company or BHC, is subject to examination, regulation, and periodic reporting under the Bank Holding Company Act of 1956, as amended, as administered by the Federal Reserve Board. The Company is required to obtain the prior approval of the Federal Reserve Board to acquire all, or substantially all, of the assets of any bank or bank holding company. Prior Federal Reserve Board approval would be required for the Company to acquire direct or indirect ownership or control of any voting securities of any bank or BHC if it would, directly or indirectly, own or control more than 5% of any class of voting shares of the bank or bank holding company.

A BHC is generally prohibited from engaging in, or acquiring, direct or indirect control of more than 5% of the voting securities of any company engaged in non-banking activities. One of the principal exceptions to this prohibition is for activities found by the Federal Reserve Board to be so closely related to banking or managing or controlling banks as to be a proper incident thereto. Some of the principal activities that the Federal Reserve Board has determined by regulation to be closely related to banking are: (i) making or servicing loans; (ii) performing certain data processing services; (iii) providing securities brokerage services; (iv) acting as fiduciary, investment or financial advisor; (v) leasing personal or real property under certain conditions; (vi) making investments in corporations or projects designed primarily to promote community welfare; and (vii) acquiring a savings association.

The Gramm-Leach-Bliley Act of 1999 authorizes a BHC that meets specified conditions, including depository institutions subsidiaries that are "well capitalized" and "well managed," to opt to become a "financial holding company." A "financial holding company" may engage in a broader array of financial activities than permitted a typical bank holding company. Such activities can include insurance underwriting and investment banking. The Company has elected to be a "financial holding company."

The Dodd-Frank Act required the Federal Reserve Board to promulgate consolidated capital requirements for bank and savings and loan holding companies that are no less stringent, both quantitatively and in terms of components of capital, than those applicable to their subsidiary depository institutions. Instruments such as cumulative preferred stock and trust-preferred securities, which are currently includable as Tier 1 capital, by bank holding companies within certain limits are no longer includable as Tier 1 capital, subject to certain grandfathering. The previously discussed final rule regarding regulatory capital requirements implements the Dodd-Frank Act's directives as to holding company capital requirements.

In December 2014, legislation was passed by Congress that requires the Federal Reserve Board to revise its "Small Bank Holding Company Policy Statement" to exempt bank and savings and loan holding companies with less than \$1.0 billion of consolidated assets from the consolidated capital requirements, provided that such companies meet certain other conditions such as not engaging in significant nonbanking activities. The Federal Reserve Board maintains authority to apply the consolidated capital requirements to any bank or savings and loan holding company as warranted for supervisory purposes. Regulations implementing the exemption were effective in May 2015. On August 28, 2018, pursuant to EGRRCPA, the Federal Reserve Board issued an interim final rule revising the Policy Statement increasing the consolidated asset limit to \$3 billion. Under the Policy Statement, a BHC that meets certain qualitative requirements:

- is exempt from the FRB's risk-based capital and leverage rules (Appendixes A and D of Regulation Y); and
- may use debt to finance up to 75% of the purchase price of an acquisition allowing a BHC to have a debt-to-equity ratio of up to 3:1.

The Policy Statement now applies to a BHC with consolidated assets of less than \$3 billion that meets the following qualitative requirements: (i) it is not engaged in significant non-banking activities either directly or through a non-bank subsidiary; (ii) it does not conduct significant off-balance sheet activities, including securitizations or asset management or administration, either directly or through a non-bank subsidiary; or (iii) it does not have a material amount of debt or equity securities outstanding (other than trust preferred securities) that are registered with the SEC. BHCs that meet these qualitative requirements are determined to be "Qualifying BHCs." A Qualifying BHC is exempt from the Federal Reserve Board's risk-based capital and leverage rules. As a consequence, it does not have to comply with the Basel III capital adequacy rules. Each subsidiary bank of a Qualifying BHC must comply with the Basel III capital adequacy rules (or as of January 1, 2020 the community bank leverage ratio) and must be well-capitalized. If any subsidiary bank is not, the Federal Reserve Board expects it to become well-capitalized within a brief period of time. This Policy Statement applies to the Company.

A BHC is generally required to give the Federal Reserve Board prior written notice of any purchase or redemption of then outstanding equity securities if the gross consideration for the purchase or redemption, when combined with the net consideration paid for all such purchases or redemptions during the preceding 12 months, is equal to 10% or more of the company's consolidated net worth. The Federal Reserve Board may disapprove such a purchase or redemption if it determines that the proposal would constitute an unsafe and unsound practice, or would violate any law, regulation, Federal Reserve Board order or directive, or any condition imposed by, or written agreement with, the Federal Reserve Board. The Federal Reserve Board has adopted an exception to that approval requirement for well-capitalized bank holding companies that meet certain other conditions. The Federal Reserve Board has issued guidance which requires consultation with the Federal Reserve Board prior to a redemption or repurchase in certain circumstances.

The Federal Reserve Board has issued a policy statement regarding the payment of dividends by BHCs. In general, the Federal Reserve Board's policies provide that dividends should be paid only out of current earnings and only if the prospective rate of earnings retention by the BHC appears consistent with the organization's capital needs, asset quality and overall financial condition. The Federal Reserve Board's policies also require that a BHC serve as a source of financial strength to its subsidiary banks by using available resources to provide capital funds during periods of financial stress or adversity and by maintaining the financial flexibility and capital-raising capacity to obtain additional resources for assisting its subsidiary banks where necessary. The Dodd-Frank Act codified the source of strength policy. Under the prompt corrective action laws, the ability of a BHC to pay dividends may be restricted if a subsidiary bank becomes undercapitalized. These regulatory policies could affect the ability of the Company to pay dividends or otherwise engage in capital distributions.

The Company and the Bank will be affected by the monetary and fiscal policies of various agencies of the United States Government, including the Federal Reserve System. In view of changing conditions in the national economy and in the money markets, it is impossible for management to accurately predict future changes in monetary policy or the effect of such changes on the business or financial condition of the Company or the Bank.

The Company's status as a registered BHC under the Bank Holding Company Act will not exempt it from certain federal and state laws and regulations applicable to corporations generally, including, without limitation, certain provisions of the federal securities laws.

Federal Securities Laws

The Company's common stock is registered with the Securities and Exchange Commission under the Securities Exchange Act of 1934. We are subject to the information, proxy solicitation, insider trading restrictions and other requirements under the Securities Exchange Act of 1934.

The registration under the Securities Act of 1933 of the Company's shares of common stock issued in the Company's initial stock offering does not cover the resale of those shares. Shares of common stock purchased by

persons who are not our affiliates may be resold without registration. Shares purchased by our affiliates are subject to the resale restrictions of Rule 144 under the Securities Act of 1933. If we meet the current public information requirements of Rule 144 under the Securities Act of 1933, each affiliate of ours that complies with the other conditions of Rule 144, including those that require the affiliate's sale to be aggregated with those of other persons, would be able to sell in the public market, without registration, a number of shares not to exceed, in any three-month period, the greater of 1% of our outstanding shares, or the average weekly volume of trading in the shares during the preceding four calendar weeks. In the future, we may permit affiliates to have their shares registered for sale under the Securities Act of 1933.

Sarbanes-Oxley Act of 2002

The Sarbanes-Oxley Act of 2002 addresses, among other issues, corporate governance, auditing and accounting, executive compensation, and enhanced and timely disclosure of corporate information. We have prepared policies, procedures and systems designed to ensure compliance with these regulations.

Federal and State Taxation

Deferred Income Tax Assets and Liabilities. Deferred Income Tax Assets and Liabilities. Deferred income tax assets and liabilities are determined using the liability method. Under this method, the net deferred tax asset or liability is recognized for the future tax consequences. This is attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases as well as net operating and capital loss carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income tax expense in the period that includes the enactment date. If current available evidence about the future raises doubt about the likelihood of a deferred tax asset being realized, a valuation allowance is established. The judgment about the level of future taxable income, including that which is considered capital, is inherently subjective and is reviewed on a continual basis as regulatory and business factors change. Effective in January 2018, the Company adopted a modification methodology, made available following changes to the New York State tax code, effecting how the Company's state income tax liability is computed. Under this adopted methodology, it is unlikely that the Company will pay income taxes to New York State in future periods and it is therefore probable that the Company's deferred tax assets related to New York State income taxes are unlikely to further reduce the Company's state income tax rate in the future. Accordingly, in the quarter ended March 31, 2019, the Company established, through a charge to earnings, a valuation allowance in the amount of \$136,000 in order to reserve against deferred tax assets related to New York State income taxes. This valuation allowance against the value of those deferred tax assets was established to reduce the net deferred tax asset related to New York income taxes to \$-0-. At December 31, 2019 and June 30, 2020, the Company's net deferred tax asset related to New York income taxes was \$-0-.

Federal Taxation

General. The Bank and the Company are subject to federal income taxation in the same general manner as other corporations, with some exceptions discussed below. The following discussion of federal taxation is intended only to summarize certain pertinent federal income tax matters and is not a comprehensive description of the tax rules applicable to the Company or the Bank.

The Company's federal tax returns are statutorily subject to potential audit for the years 2016 through 2019. No federal income tax returns are under audit as of the date of this prospectus.

Method of Accounting. For federal income tax purposes, the Company currently reports its income and expenses on the accrual method of accounting and uses a tax year ending December 31 for filing its federal and state income tax returns.

Bad Debt Reserves. Prior to 1996, Pathfinder Bank was permitted to establish a reserve for bad debts and to make annual additions to the reserve. These additions could, within specified formula limits, be deducted in arriving at our taxable income. As a result of tax law changes in 1996, Pathfinder Bank was required to use the specific charge-off method in computing its bad debt deduction beginning with its 1996 federal tax return. Savings institutions were required to recapture any excess reserves over those established as of December 31, 1987 (base year reserve). At June 30, 2020, Pathfinder Bank had no reserves subject to recapture in excess of its base year reserves. The Bank continues to be required to use the specific charge-off method to account for tax bad debt deductions.

Taxable Distributions and Recapture. Prior to 1996, bad debt reserves created prior to 1988 were subject to recapture into taxable income if Pathfinder Bank failed to meet certain thrift asset and definitional tests or made certain distributions. Tax law changes in 1996 eliminated thrift-related recapture rules. However, under current law, pre-1988 tax bad debt reserves remain subject to recapture if Pathfinder Bank makes certain non-dividend distributions, repurchases any of its common stock, pays dividends in excess of earnings and profits, or fails to qualify as a "bank" for tax purposes. At June 30, 2020 our total federal pre-base year bad debt reserve was approximately \$1.3 million.

Net Operating Loss Carryovers. Federal tax law allows net operating losses to be carried forward indefinitely with the net operating loss deduction limited to 80% of taxable income in any carryforward year.

Corporate Dividends Received Deduction. The Company may exclude from its federal taxable income 100% of dividends received from Pathfinder Bank as a wholly-owned subsidiary by filing consolidated tax returns. The corporate dividends received deduction is 65% when the corporation receiving the dividend owns at least 20% of the stock of the distributing corporation. The dividends-received deduction is 50% when the corporation receiving the dividend owns less than 20% of the distributing corporation.

Interest Expense. Federal tax law limits a taxpayer's annual deduction of business interest expense to the sum of (i) business interest income and (ii) 30% of "adjusted taxable income", defined as a business's taxable income without taking into account business interest income or expense, net operating losses, and, for 2018 through 2021, depreciation, amortization and depletion. Because we generate significant amounts of net interest income, we do not expect to be impacted by this limitation.

Employee Compensation. A publicly held corporation is not permitted to deduct compensation in excess of \$1 million per year paid to certain employees. Federal tax law eliminates certain exceptions to the \$1 million limit applicable under prior law related to performance-based compensation, such as equity grants and cash bonuses that are paid only on the attainment of performance goals. Based on our current compensation plans, we do not expect to be impacted by this limitation.

Business Asset Expensing. Federal tax law allows taxpayers to immediately expense the entire cost of certain depreciable tangible property and real property improvements acquired and placed in service after September 27, 2017 and before January 1, 2023 (with an additional year for certain property). This 100% bonus depreciation is phased out proportionately for property placed in service on or after January 1, 2023 and before January 1, 2027 (with an additional year for certain property).

State Taxation

New York State franchise tax is imposed in an amount equal to the greater of 6.5% of Business Income, 0.05% of average Business Capital, or a fixed dollar amount based on New York sourced gross receipts. Various Business Income subtraction modifications are available to qualified banks based on its qualified loan portfolio. Commencing January 1, 2018, the Company changed its subtraction modification from that of a captive real estate investment trust (REIT) to one based on interest income from qualifying loans. This change follows the laws enacted by New York State effective January 1, 2015. As a result, beginning in 2018 the

Company is subject to a fixed dollar amount and the current effective income tax rate in New York State was reduced to close to \$0. It is anticipated that the Company's New York State effective income tax will remain substantially at 0.0% for future periods under the current law.

As a Maryland business corporation, the Company is required to file an annual report with, and pay franchise taxes to, the State of Maryland.

Properties

The Company has seven offices located in Oswego County, three offices in Onondaga County and one limited purpose office in Oneida County. Management believes that the Bank's facilities are adequate for the business conducted. The following table sets forth certain information concerning the main office and each branch office of the Bank at June 30, 2020. The aggregate net book value of the Bank's premises and equipment was \$22.3 million at June 30, 2020.

<u>Location</u>	Opening Date	Owned/Leased
Main Office 214 West First Street Oswego, New York 13126	1874	Owned
Plaza Branch Route 104, Ames Plaza Oswego, New York 13126	1989	Owned (1)
Mexico Branch Norman & Main Streets Mexico, New York 13114	1978	Owned
Oswego East Branch 34 East Bridge Street Oswego, New York 13126	1994	Owned
Lacona Branch 1897 Harwood Drive Lacona, New York 13083	2002	Owned
Fulton Branch 5 West First Street South Fulton, New York 13069	2003	Owned (2)
Central Square Branch 3025 East Ave Central Square, New York 13036	2005	Owned
Cicero Branch 6194 State Route 31 Cicero, New York 13039	2011	Owned
Syracuse Pike Block Branch 109 West Fayette Street Syracuse, New York 13202	2014	Leased (3)
Clay Branch 3775 State Route 31 Liverpool, NY 13090	2018	Leased (4)
Utica Loan Production Office 258 Genesee Street Utica, New York 13502	2017	Leased (5)

⁽¹⁾ The building is owned; the underlying land is leased with an annual rent of \$35,000.

⁽²⁾ The building is owned; the underlying land is leased with an annual rent of \$37,000.

- (3) The premises are leased with an annual rent of \$90,000.
- (4) The premises are leased with an annual rent of \$70,000.
- (5) The premises are leased with an annual rent of \$16,000.

Legal Proceedings

There are various claims and lawsuits to which the Company is periodically involved that are incidental to the Company's business, most notably foreclosures. In the opinion of management, such claims and lawsuits in the aggregate are not expected to have a material adverse impact on the Company's consolidated financial condition and results of operations at June 30, 2020.

Securities Authorized for Issuance Under Equity Compensation Plans

The following table provides information as of December 31, 2019 with respect to shares of common stock that may be issued under the Company's existing equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	avera price o	eighted- ge exercise f outstanding options, ats and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by security holders	302,651	\$	10.51	51,141
Equity compensation plans not approved by stockholders	N/A		N/A	N/A

Management's Discussion and Analysis of Financial Condition and Results of Operations

At or For the Quarter and Six Months Ended June 30, 2020 as compared to At or For the Quarter and Six Months Ended June 30, 2019

General

The Company is a Maryland corporation headquartered in Oswego, New York. The Company is 100% owned by public shareholders. The primary business of the Company is its investment in the Bank, a New York State chartered commercial bank, which is 100% owned by the Company. The Bank has two wholly owned operating subsidiaries, Pathfinder Risk Management Company, Inc. ("PRMC") and Whispering Oaks Development Corp. All significant inter-company accounts and activity have been eliminated in consolidation. Although the Company owns, through its subsidiary PRMC, 51% of the membership interest in FitzGibbons Agency, LLC, the Company is required to consolidate 100% of FitzGibbons within the consolidated financial statements. The 49% of which the Company does not own is accounted for separately as noncontrolling interests within the consolidated financial statements. At June 30, 2020, the Company and subsidiaries had total consolidated assets of \$1.2 billion, total consolidated liabilities of \$1.1 billion and shareholders' equity of \$92.0 million plus noncontrolling interest of \$292,000, which represents the 49% of FitzGibbons not owned by the Company.

The following discussion reviews the Company's financial condition at June 30, 2020 and the results of operations for the three and six month periods ended June 30, 2020 and 2019. Operating results for the three and six months ended June 30, 2020 are not necessarily indicative of the results that may be expected for the year ending December 31, 2020 or any other period.

COVID-19 Response

In early January 2020, the World Health Organization issued an alert that a novel coronavirus outbreak was emanating from Wuhan, Hubei Province in China. Over the course of the next several weeks, the outbreak

continued to spread to various regions of the world prompting the World Health Organization to declare COVID-19 a global pandemic on March 11, 2020. In the United States, by the end of March 2020, the rapid spread of the COVID-19 virus invoked various Federal and New York State authorities to make emergency declarations and issue executive orders to limit the spread of the disease. Measures included restrictions on international and domestic travel, limitations on public gatherings, implementation of social distancing and sanitization protocols, school closings, orders to shelter in place and mandates to close all non-essential businesses to the public. To widely varying degrees, largely dependent upon the level of local and regional outbreaks and the resultant levels of strain on locally-available medical resources, these very substantial curtailments of social and economic activity have been relaxed globally and in the United States. However, there is virtually no locality within the United States that has returned to substantively normal business and social activities at the time of this filing and the spread rate of the coronavirus remains extremely high in many regions of the country.

As a result of the initial and continuing outbreak, and governmental response thereto, the spread of the coronavirus has caused us to modify our business practices, including employee travel, employee work locations, and cancellation of physical participation in meetings, events and conferences. The Company has many employees working remotely and has also reduced physical customer contact with employees and other customers significantly by limiting branch activities. Initially, branch activities were limited to drive-thru transactions whenever possible, teleconferencing and in-branch "appointments only" services. The Bank's branches are now fully accessible to the public but remain in strict compliance with all applicable social distancing and sanitization guidelines. Since the start of the pandemic, transactional volume has also increased through the Bank's telephone and internet banking channels. We will take further actions for safety as may be required by government authorities or that we determine to be in the best interests of our employees, customers and business partners.

Concerns about the spread of the disease and its anticipated negative impact on economic activity, severely disrupted both domestic and international financial markets prompting the world's central banks to inject significant amounts of monetary stimulus into their respective economies. In the United States, the Federal Reserve System's Federal Open Market Committee, swiftly cut the target Federal Funds rate to a range of 0% to 0.25%, including a 50 basis point reduction in the target federal funds rate on March 3, 2020 and an additional 100 basis point reduction on March 15, 2020. In addition, the Federal Reserve initiated various market support programs to ease the stress on financial markets. This significant reduction in short-term interest rates has reduced, and will continue to reduce, the Bank's cost of funds and interest earning-asset yields. The long-term effects of the current interest rate environment, that has resulted from government and central bank responses to the pandemic, on the Bank's net interest margins cannot be predicted with certainty at this time.

The CARES Act, signed into law on March 27, 2020, provides financial assistance in various forms to both businesses and consumers. In addition, the CARES Act also created many directives affecting the operations of financial services providers, such as the Company, including a forbearance program for federally-backed mortgage loans and protections for borrowers from negative credit reporting due to loan accommodations related to the national emergency. The banking regulatory agencies have likewise issued guidance encouraging financial institutions to work prudently with borrowers who are, or may be, unable to meet their contractual payment obligations because of the effects of COVID-19. The Company has worked to assist its business and individual customers affected by COVID-19. Through June 30, 2020, the Bank granted payment deferral requests primarily for 90 days, on 556 loans representing approximately \$145.6 million of existing loan balances.

The Bank participated in the PPP, a \$650 billion specialized low-interest loan program funded by the U.S. Treasury Department and administered by the SBA pursuant to the CARES Act and subsequent legislation. PPP loans have an interest rate of 1.0%, a two-year or five-year loan term to maturity, and principal and interest payments deferred until the lender receives the applicable forgiven amount or 10 months after the period the business has used such funds. The SBA guarantees 100% of the PPP loans made to eligible borrowers. The entire principal amount of the borrower's PPP loan, including any accrued interest, is eligible to be reduced by the loan

forgiveness amount under the PPP so long as employee and compensation levels of the business are maintained and 60% of the loan proceeds are used for payroll expenses, with the remaining 40% of the loan proceeds used for other qualifying expenses. Through June 30, 2020, the Bank has submitted to and received approval from the SBA for 680 loans totaling approximately \$73.8 million through this program.

The COVID-19 crisis is expected to continue to impact the Company's financial results, as well as demand for its services and products during the remainder of 2020 and potentially beyond. The short- and long-term implications of the COVID-19 crisis on the Company's future revenues, earnings results, the allowance for loan losses, capital reserves, and liquidity are unknown at this time.

Application of Critical Accounting Policies

The Company's consolidated annual financial statements are prepared in accordance with accounting principles generally accepted in the United States and follow practices within the banking industry. Application of these principles requires management to make estimates, assumptions, and judgments that affect the amounts reported in the consolidated annual financial statements and accompanying notes. These estimates, assumptions, and judgments are based on information available as of the date of the financial statements; accordingly, as this information changes, the financial statements could reflect different estimates, assumptions, and judgments. Certain accounting policies inherently have a greater reliance on the use of estimates, assumptions, and judgments and, as such, have a greater possibility of producing results that could be materially different than originally reported. Estimates, assumptions, and judgments are necessary when assets and liabilities are required to be recorded at fair value or when an asset or liability needs to be recorded contingent upon a future event. Carrying assets and liabilities at fair value inherently results in more financial statement volatility. The fair values and information used to record valuation adjustments for certain assets and liabilities are based on quoted market prices or are provided by unaffiliated third-party sources, when available. When third party information is not available, valuation adjustments are estimated in good faith by management.

The most significant accounting policies followed by the Company are presented in Note 1 to the annual audited consolidated financial statements. These policies, along with the disclosures presented in the other financial statement notes and in this discussion, provide information on how significant assets and liabilities are valued in the consolidated annual financial statements and how those values are determined. Based on the valuation techniques used and the sensitivity of financial statement amounts to the methods, assumptions, and estimates underlying those amounts, management has identified the allowance for loan losses, deferred income taxes, pension obligations, the evaluation of investment securities for other than temporary impairment, the estimation of fair values for accounting and disclosure purposes, and the evaluation of goodwill for impairment to be the accounting areas that require the most subjective and complex judgments. These areas could be the most subject to revision as new information becomes available.

The allowance for loan losses represents management's estimate of probable loan losses inherent in the loan portfolio. Determining the amount of the allowance for loan losses is considered a critical accounting estimate because it requires significant judgment on the use of estimates related to the amount and timing of expected future cash flows on impaired loans, estimated losses on pools of homogeneous loans based on historical loss experience, and consideration of current economic trends and conditions, all of which may be susceptible to significant change.

Our Allowance for Loan and Lease Losses policy establishes criteria for selecting loans to be measured for impairment based on the following: Residential and Consumer Loans:

- All loans rated substandard or worse, on nonaccrual, and above our total related credit ("TRC") threshold balance of \$300,000.
- All Troubled Debt Restructured Loans

Commercial Lines and Loans, Commercial Real Estate and Tax-exempt loans:

- All loans rated substandard or worse, on nonaccrual, and above our TRC threshold balance of \$100,000.
- All Troubled Debt Restructured Loans

Impairment is measured by determining the present value of expected future cash flows or, for collateral-dependent loans, the fair value of the collateral adjusted for market conditions and selling expenses as compared to the loan carrying value. For all other loans and leases, the Company uses the general allocation methodology that establishes an allowance to estimate the probable incurred loss for each risk-rating category.

Deferred income tax assets and liabilities are determined using the liability method. Under this method, the net deferred tax asset or liability is recognized for the future tax consequences. This is attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases as well as net operating and capital loss carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income tax expense in the period that includes the enactment date. If current available evidence about the future raises doubt about the likelihood of a deferred tax asset being realized, a valuation allowance is established. The judgment about the level of future taxable income, including that which is considered capital, is inherently subjective and is reviewed on a continual basis as regulatory and business factors change.

Effective in January 2018, the Company adopted a modification methodology, made available following changes to the New York State tax code, affecting how the Company's state income tax liability is computed. Under this adopted methodology it is unlikely that the Company will pay income taxes to New York in future periods and it is therefore probable that the Company's deferred tax assets related to New York State income taxes are unlikely to further reduce the Company's state income tax rate in the future. Accordingly, a valuation allowance against the value of those deferred tax assets was established to reduce the net deferred tax asset related to New York income taxes to \$0. Therefore, as of January 1, 2019, the Company established, through a charge to earnings, a valuation allowance in the amount of \$136,000 in order to reserve against deferred tax assets related to New York State income taxes.

In the quarter ended March 31, 2020, Management determined that the Company, under the current New York State ("NYS") tax code, was highly unlikely to incur a material NYS tax liability in the foreseeable future. As a result, certain net current and deferred tax assets, related to GAAP vs. tax timing differences under previous NYS tax law, were no longer going to provide any future tax benefit. The substantial majority of these net deferred tax assets were offset by a related valuation allowance established in prior periods. Upon analysis of all factors related to the expected future filings of NYS tax returns, the Company eliminated its remaining NYS net deferred tax asset balances and the related valuation allowance on January 1, 2020. The effect of these eliminations required an adjustment to other comprehensive income of \$206,000 and had no effect on first half 2020 reported earnings. At June 30, 2019, the Company had a valuation allowance of \$61,000 established against the future projected benefits of deferred tax assets related to New York State income tax obligations.

The Company's effective tax rate typically differs from the 21% federal statutory tax rate due primarily to tax-exempt income from specific types of investment securities and loans, bank owned life insurance, and, to a much lesser degree, the utilization of low income housing tax credits, as well as a the effects of transitional adjustments related to state income taxes and certain taxes payable to states other than New York. The effective tax rate was 20.5% for the six month period ended June 30, 2020.

We maintain a noncontributory defined benefit pension plan covering most employees. The plan provides defined benefits based on years of service and final average salary. On May 14, 2012, we informed our employees of our decision to freeze participation and benefit accruals under the plan, primarily to reduce some of

the volatility in earnings that can accompany the maintenance of a defined benefit plan. Pension and post-retirement benefit plan liabilities and expenses are based upon actuarial assumptions of future events; including fair value of plan assets, interest rates, and the length of time the Company will have to provide those benefits.

The Company carries all of its available-for-sale investments at fair value with any unrealized gains or losses reported, net of tax, as an adjustment to shareholders' equity and included in accumulated other comprehensive income (loss), except for the credit-related portion of debt securities impairment losses and OTTI of equity securities which are charged to earnings. The Company's ability to fully realize the value of its investments in various securities, including corporate debt securities, is dependent on the underlying creditworthiness of the issuing organization. In evaluating the debt securities (both available-for-sale and held-to-maturity) portfolio for other-than-temporary impairment losses, management considers (1) if we intend to sell the security; (2) if it is "more likely than not" we will be required to sell the security before recovery of its amortized cost basis; or (3) if the present value of expected cash flows is not sufficient to recover the entire amortized cost basis. When the fair value of a held-to-maturity or available-for-sale security is less than its amortized cost basis, an assessment is made as to whether OTTI is present. The Company considers numerous factors when determining whether a potential OTTI exists and the period over which the debt security is expected to recover. The principal factors considered are (1) the length of time and the extent to which the fair value has been less than the amortized cost basis, (2) the financial condition of the issue and (guarantor, if any) and adverse conditions specifically related to the security, industry or geographic area, (3) failure of the issuer of the security to make scheduled interest or principal payments, (4) any changes to the rating of the security by a NRSRO, and (5) the presence of credit enhancements, if any, including the guarantee of the federal government or any of its agencies.

The estimation of fair value is significant to several of our assets; including loans, available-for-sale and marketable equity investment securities, intangible assets, foreclosed real estate, and the value of loan collateral when valuing impaired loans. These are all recorded at either fair value, or the lower of cost or fair value. Fair values are determined based on third party sources, when available. Furthermore, accounting principles generally accepted in the United States require disclosure of the fair value of financial instruments as a part of the notes to the annual audited consolidated financial statements. Fair values on our available-for-sale securities may be influenced by a number of factors; including market interest rates, prepayment speeds, discount rates, and the shape of yield curves.

Fair values for securities available-for-sale are obtained from unaffiliated third party pricing services. Where available, fair values are based on quoted prices on a nationally recognized securities exchange. If quoted prices are not available, fair values are measured using quoted market prices for similar benchmark securities. Management made no adjustments to the fair value quotes that were provided by the pricing sources. Fair values for marketable equity securities are based on quoted prices on a nationally recognized securities exchange for similar benchmark securities. The fair values of foreclosed real estate and the underlying collateral value of impaired loans are typically determined based on evaluations by third parties, less estimated costs to sell. When necessary, appraisals are updated to reflect changes in market conditions.

Management performs an annual evaluation of our goodwill for possible impairment at each of our reporting units. Based on the results of the December 31, 2019 evaluation, management has determined that the carrying value of goodwill was not impaired as of that date. Management will continuously evaluate all relevant economic and operational factors potentially affecting the Bank or the fair value of its assets, including goodwill. Should the current pandemic, or the future economic consequences thereof, require a significant and sustained change in the operations of the Bank, re-evaluations of the Bank's goodwill valuation will be conducted on a more frequent basis.

Recent Events

On June 30, 2020, the Company announced that the Board of Directors declared a quarterly cash dividend of \$0.06 per common and preferred share and a cash dividend of \$0.06 per notional share for the issued common stock warrant. The dividends are payable on August 14, 2020 to shareholders of record on July 17, 2020.

Overview and Results of Operations

The following represents the significant highlights of the Company's operating results between the second quarter of 2020 and the second quarter of 2019.

- Net income increased \$1.2 million, or 203.0%, to \$1.8 million.
- Basic and diluted earnings per share were both \$0.31 per share and increased \$0.20 per share.
- Return on average assets increased 38 basis points to 0.63% as the increase in income outpaced the increase in average assets.
- Net interest income, after provision for loan losses, increased \$398,000, or 6.5%, to \$6.5 million. Excluding the provision, net interest income increased \$934,000, or 13.9%, to \$7.6 million. The increase in net interest income after provision for loan losses was primarily due to the increase in average balances of interest-earning assets, offset by a significant increase in the provision for loan losses, which is reflective of an increase in average loan balances. Additional provisioning for loan losses was also applied as a reflection of the substantial increase in economic uncertainty and the resultant potential for increased credit losses in future periods as a consequence of the COVID-19 pandemic.
- Net interest margin decreased by 15 basis points to 2.75%, primarily as a result of a \$50.0 million increase in the average balance of time deposits, coupled with a 77 basis point decrease in the average rate paid on time deposits.
- The effective income tax rate decreased 3.1% to 19.1% for the three months ended June 30, 2020 as compared to 22.2% for the same three month period in 2019. The decrease in the tax rate in the second quarter of 2020, as compared to the same quarter in 2019, was primarily related to immaterial nonrecurring adjustments made to income tax expense in the second quarter of 2019 related to New York State taxes.

The following represents significant highlights of the Company's operating results between the first six months of 2020 and the first six months of 2019.

- Net income increased \$2.4 million, or 215.0%, to \$3.5 million.
- Basic and diluted earnings per share were both \$0.60 per share and increased \$0.37 per share.
- Net interest income, after provision for loan losses, increased by \$707,000, or 5.7%, to \$13.2 million. This increase in net interest income after provision for loan losses was primarily due to the increase in average balances of interest-earning assets, offset by a significant increase in the provision for loan losses, which is reflective of an increase in average loan balances. Additional provisioning for loan losses was also applied as a reflection of the substantial increase in economic uncertainty and the resultant potential for increased credit losses in future periods as a consequence of the COVID-19 pandemic.
- Net interest margin decreased by three basis points to 2.88%, primarily as a result of a \$65.5 million increase in the average balance of time deposits, coupled with a 51 basis point decrease in the average rate paid on time deposits.
- The effective income tax rate decreased 7.3% to 20.5% for the six months ended June 30, 2020 as compared to 27.8% for the same six month period in 2019. This decrease was primarily related to the 2019 nonrecurring establishment, through a charge to earnings, of a \$136,000 valuation allowance to reserve against deferred tax assets related to New York State income taxes.

The following reflects the significant changes in financial condition between December 31, 2019 and June 30, 2020. In addition, the following reflects significant changes in asset quality metrics between June 30, 2019 and June 30, 2020.

- Total assets increased \$73.2 million, or 6.7% to \$1.2 billion at June 30, 2020, as compared to December 31, 2019, primarily due to increases in loans, cash and cash equivalents, and investment securities. These increases were funded largely by increases in deposits, including brokered deposits, as well as the cash flow from the sale and maturity of investment securities.
- Asset quality metrics, as measured by net loan charge-offs, remained stable, in comparison to recent reporting periods. The annualized net loan charge-offs to average loans ratio was 0.08% for the second quarter of 2020, compared to 0.07% for the second quarter of 2019, and 0.09% for the fourth quarter of 2019. Nonperforming loans to total loans increased 50 basis points to 1.04% at June 30, 2020, compared to 0.54% at June 30, 2018. Nonperforming loans to total loans increased 37 basis points to 1.04% at June 30, 2020 compared to 0.67% at December 31, 2019. Correspondingly, the ratio of the allowance for loan losses to nonperforming loans for second quarter 2020 was 125.86%, as compared to 208.39% at June 30, 2019, and 165.25% at December 31, 2019.

The Company had net income of \$1.8 million for the three months ended June 30, 20120 compared to net income of \$607,000 for the three months ended June 30, 2019. The \$1.2 million increase in net income was due primarily to a \$781,000 decrease in noninterest expense, a \$528,000 decrease in interest expense, a \$406,000 increase in interest and dividend income, and a \$312,000 increase in noninterest income. These fluctuations were partially offset by a \$536,000 increase in the provision for loan losses and a \$264,000 increase in income tax expense.

Net interest income before the provision for loan losses increased \$934,000, or 13.9%, to \$7.6 million for the three months ended June 30, 2020 as compared to \$6.7 million for the same three month period in 2019. The increase was primarily the result of the increase in average interest-earning asset balances due to increases among all interest earning asset categories. The positive effects of increased average interest-earning assets for the three months ended June 30, 2020, as compared to the same three month period in 2019, were partially offset by a decrease in the average yield of interest-earning assets of 58 basis points to 3.78% for the three months ended June 30, 2020 from 4.36% for the same three month period of the previous year. Further, this increase in net interest income was partially offset by an increase of \$115.8 million in the average balance of interest bearing liabilities, which was partially offset by a 44 basis point decrease in the average cost of interest-bearing liabilities between the year-over-year second quarter periods.

The \$312,000, or 25.6%, increase in noninterest income in the quarter ended June 30, 2020, as compared to the same quarterly period in 2019, was primarily the result of a \$253,000 increase in income from the combined investment related activities of (1) net gains on sales and redemptions of investment securities and (2) net losses on equity securities. During the second quarter of 2020, net gains on sales and redemptions of investment securities increased \$991,000, as compared to the previous year period, and this increase was partially offset by a \$738,000 decline in gains on equity securities, compared to the second quarter of 2019. Further contributing to the increase in noninterest income was a net increase of \$84,000 in net gains on sales of loans and foreclosed real estate for the current period. All other noninterest income categories decreased by \$25,000, or 2.2%, in the three months ended June 30, 2020, as compared to the same prior year period. The overall increases in noninterest income were significantly muted in the second quarter of 2020 by reduced customer transactional activity levels and the Bank's increased levels of fee waivers and other forbearances in response to the local economic effects of the COVID-19 pandemic.

The increase in net gains on sales and redemptions of investment securities of \$991,000 in the second quarter of 2020, as compared to the same quarter of 2019, was comprised of net gains on sale of \$908,000 related to available-for-sale fixed-income securities and \$115,000 related to the sale of a portion of the Company's previously-held equity investment in an otherwise unaffiliated financial institution. During the current quarter,

the Company sold 18 fixed-income investment securities, with an aggregate amortized historical cost of \$23.8 million, and recognized net gains of \$908,000 on those sales. These securities were sold in order to improve the expected future total returns within the investment portfolio, particularly in light of potentially increased prepayment activity, related to the sharp decline in general interest rates, and/or potential credit downgrade concerns following the onset of the COVID-19 pandemic.

Since 2016, the Company held a passive equity investment, acquired for \$534,000, in an otherwise unaffiliated financial institution. The issuer of that common stock was acquired in June 2020 by another financial institution. The acquisition resulted in the Company receiving total consideration of \$911,000 for its equity investment, based on the closing stock price of the acquiring institution on June 30, 2020. The Company surrendered its original equity investment and received \$265,000 in cash as well as shares in the acquiring institution valued at \$646,000 at June 30, 2020. As a result, during the second quarter of 2020, the Company recorded a net gain on sales and redemptions of investment securities of \$115,000 and a gain on equity securities of \$438,000. The Company retained a position in the acquiring bank valued at \$646,000 at June 30, 2020 and has the ability to hold the investment indefinitely.

Finally, the Company held a fixed-income, previously non-traded investment, categorized as available-for-sale, which was managed since its purchase in 2017 by an external party. The investment was previously reported at its stated net asset value, which was \$2.1 million at March 31, 2020. The investment, was substantially restructured and subsequently listed on June 17, 2020 as a publicly-traded common stock on the New York Stock Exchange. Due to what management believes were technical factors related to the listing itself, and the almost universal pricing pressure on publicly-traded assets of this type in the current uncertain economic environment, the closing stock price at June 30, 2020 was significantly below the historical amortized cost of the investment on that date. Therefore, the restructuring and listing events caused the Company to recognize an unrealized loss in the second quarter of 2020 of \$1.2 million, which was measured by the difference between its closing stock price at June 30, 2020 and its net asset value at March 31, 2020. As an equity security, the fair value of this investment is now required, under generally accepted accounting principles (GAAP), to be recorded at its readily determinable market value with changes in market value recorded as an adjustment to current earnings in the period incurred. Accordingly, the Company recorded the reduction in the fair value of the investment as a charge to pretax net income in the quarter ended June 30, 2020 and the investment's fair value was \$918,000 at that date. The Company's management believes that the investment is fundamentally sound, will sustainably generate significant dividend income in the future and that the Company has the ability to hold the security indefinitely.

The \$781,000 decrease in noninterest expense in the quarter ended June 30, 2020, as compared to the same quarterly period in 2019, was due primarily to a decrease of \$482,000, or 14.0%, in salaries and employee benefits expense. The decrease in salaries and employee benefit expense was primarily due to a \$359,000 decrease in net salaries expense and a \$170,000 decrease in employee benefits expense. The decrease in net salaries expense was partially the result of a significant absorption of these expenses into the unamortized cost of the originated PPP loans as required under GAAP. During the second quarter, the Bank originated \$73.8 million in PPP loans and deferrals of employee-related expenses related to those originations resulted in an overall net decrease of \$331,000 in employee-related expenses for the current quarter, as compared to the second quarter 2019. All other employee-related expenses declined an aggregate \$299,000 in the second quarter of 2020, as compared to the same quarterly period in 2019. All other noninterest expenses unrelated to personnel expenses declined primarily due to reductions in expenditures for community service activities, training, and meals and entertainment of \$132,000, \$93,000 and \$44,000, respectively. These expenses were substantially curtailed in the period as a result of the significant restrictions placed on many business activities as a result of the pandemic.

For the three months ended June 30, 2020, we recorded \$1.1 million in provision for loan losses as compared to \$610,000 in the same prior year three month period. This \$536,000 increase in the provision for loan losses was primarily due to economic uncertainty and the resultant potential for increased credit losses in future periods, as a result of the COVID-19 pandemic. Additionally, the provision reflects an increase in outstanding

loan balances of \$113.2 million, or 16.3%, in the second quarter of 2020, compared to the same quarter in the previous year, as well as an increase in the non-performing loans to period end loans as a result of four commercial loan relationships.

In comparing the year-over-year second quarter periods, the return on average assets increased 38 basis points to 0.63% due to the combined effects of the increase in net income (the numerator in the ratio) and the increase in average assets (the denominator in the ratio). Average assets increased due to increases in average loans and average federal funds sold and interest earning deposits of \$129.8 million and \$54.0 million, respectively, in the second quarter of 2020 as compared to the same quarter of 2019. Average interest-bearing deposits increased \$100.0 million in the second quarter of 2020, as compared with the same quarter in 2019. The increase in deposits was due to growth in retail and commercial relationship deposits as a result of the Bank's participation in the PPP lending program, along with brokered deposit inflows, as a result of the Bank's efforts to significantly increase cash and cash equivalent balances in response to the COVID-19 pandemic.

The Company had net income of \$3.6 million for the six months ended June 30, 2020 compared to net income of \$1.1 million for the six months ended June 30, 2019. The \$2.5 million increase in net income was due primarily to a \$2.2 million increase in net interest income, a \$967,000 increase in noninterest income and \$1.2 million decrease in noninterest expense. These fluctuations were partially offset by an increase of \$1.5 million in the provision for loan losses and a \$468,000 increase in income tax expense.

Net interest income before the provision for loan losses increased \$2.2 million to \$15.4 million for the six months ended June 30, 2020, as compared to \$13.3 million for the same six month period in 2019. The increase was due principally to a \$1.8 million, or 9.0%, increase in interest and dividend income that was a result of growth in average interest-earning assets of \$157.4 million compared to the prior year six month period. Average loans for the first six months of 2020 increased by \$128.5 million, or 19.8%, over the prior year period, primarily the result of growth in the commercial loan portfolios and in particular PPP loans, while the average interest rate earned on interest-earning assets decreased by 31 basis points. Average interest-bearing liabilities increased by \$107.6 million, or 13.78%, for the six months ended June 30, 2020 as compared to the prior year period; however, the average interest rate paid on interest-bearing liabilities decreased by 29 basis points.

\$967,000, or 41.8%, increase in noninterest income for the six months ended June 30, 2020, when compared to the same six month period in 2019, was primarily the result of an increase of \$938,000 in net gains on sales and redemptions of investment securities, and a \$764,000 increase in net gains on the sales of loans and foreclosed real estate. The investment securities sales were part of the Company's portfolio optimization and liquidity management strategies. The increased gain on the sales of loans and foreclosed real estate was primarily the result of the sale of \$35.9 million in seasoned, conforming residential mortgage loans that was completed in January 2020 and resulted in the recognition of a gain of \$659,000. Also contributing to the increase in noninterest income was other charges, commissions and fees, insurance agency revenue, debit card interchange fees, loan servicing fees, and service charges on deposit accounts, which increased \$70,000, \$61,000, \$37,000, \$41,000, and \$29,000, respectively. The net increase in these categories of noninterest income were in part due to the Company's increased strategic focus on improving recurring noninterest income. However, as noted above, overall increases in noninterest income were significantly muted in the second quarter of 2020 by reduced customer activity levels and the Bank's increased levels of fee waivers and forbearances in response to the local economic effects of the COVID-19 pandemic. These net increases in noninterest income were partially offset by a \$973,000 increase in net losses on equity securities, as discussed above.

Total noninterest expense for the six month period of 2020 was \$12.0 million, a decrease of \$1.2 million, or 9.4%, compared with \$13.2 million for the prior year period. The reduced noninterest expense for the six month period ended June 30, 2020, as compared to the same period in 2019, was principally driven by a decrease of \$885,000 in personnel expenses, a \$261,000 decrease in foreclosed real estate expenses, and a \$163,000 reduction in community service activities expenses. The decrease in personnel expenses in the first six months of 2020, as compared to the same six month period in 2019, was primarily due to a \$470,000 decrease in net salaries

expense. This reduction in net salaries expense primarily resulted from the increased deferral of these expenses into the unamortized cost of the loans originated in the first six months of 2020. The increased volume of loans originated in the first six months of 2020, as compared to the same period in 2019, was due primarily to the PPP loan volume originated in the second quarter of 2020, as discussed above. In addition, personnel expenses declined in the six months ended June 30, 2020, as compared to the same period in 2019, due primarily to decreases of \$319,000 in employee benefits. The decrease in other employee benefits for the six months ended June 30, 2020, as compared to the same six month period in 2019, was primarily due to decreases in pension, employee medical and other employee benefits expenses of \$144,000, \$76,000 and \$49,000, respectively. Pension expense decreased \$144,000 primarily due to the higher market value of pension assets held in trust at January 1, 2020 as compared to the same date in 2019. The higher market values for pension assets resulted from market value appreciation of those assets in 2019. Medical expenses declined primarily due to reduced employee utilization of elective medical services and increased cost sharing of certain medical costs with employees in 2020, as compared to the previous year. The decrease in other employee benefits expenses related to reduced levels of certain training, employee recognition and other employee-related activities due primarily to restrictions on such activities resulting from the pandemic.

For the first six months of 2020, we recorded \$2.2 million in provision for loan losses as compared to \$754,000 in the same prior year six month period. This \$1.5 million increase in the provision for loan losses resulted from year-over-year increases in: (1) the qualitative factors used in determining the adequacy of the allowance for loan losses, (2) the size of the loan portfolio, and (3) delinquent and nonaccrual loans. The increase in the quantitative factors used in determining the provision for loan losses reflected the substantial increase in economic uncertainty and the resultant potential for increased credit losses in future periods as a consequence of the COVID-19 pandemic. Outstanding loan balances increased \$113.2 million, or 16.3%, in the quarter ended June 30, 2020, as compared to the same quarter in the previous year, and therefore required a corresponding increase in the estimable and probable loan losses inherent in the loan portfolio. Finally, the provision for loan losses in the six months ended June 30, 2020 was further increased, as compared to the same period in 2019, by the effects of an increase in the ratio of delinquent loans to total loans, which increased to 3.19% at June 30, 2020 as compared to 2.45% at June 30, 2019, coupled with an increase in nonaccrual loans that increased \$4.6 million to \$8.4 million at June 30, 2020 as compared to \$3.8 million at June 30, 2019.

Return on average assets increased 39 basis points to 0.62% between the year-over-year six month periods as the change in net income in the six month period ended June 30, 2020 (the numerator of the ratio) increased by a higher percentage than the rate at which average assets (the denominator of the ratio) grew during the period.

Net Interest Income

Net interest income is the Company's primary source of operating income for payment of operating expenses and providing for loan losses. It is the amount by which interest earned on loans, interest-earning deposits, and investment securities, exceeds the interest paid on deposits and other interest-bearing liabilities. Changes in net interest income and net interest margin result from the interaction between the volume and composition of interest-earning assets, interest-bearing liabilities, related yields, and associated funding costs.

The following tables set forth information concerning average interest-earning assets and interest-bearing liabilities and the average yields and rates thereon for the periods indicated. Interest income and resultant yield information in the tables has not been adjusted for tax equivalency. Averages are computed on the daily average balance for each month in the period divided by the number of days in the period. Yields and amounts earned include loan fees. Nonaccrual loans have been included in interest-earning assets for purposes of these calculations.

		For the three months ended June 30,							
		2020			2019				
	Average		Average Yield /	Average		Average Yield /			
(Dollars in thousands)	Balance	Interest	Cost	Balance	Interest	Cost			
Interest-earning assets:									
Loans	\$ 796,267	\$ 8,832	4.44%	\$666,428	\$ 8,222	4.93%			
Taxable investment securities	230,943	1,613	2.79%	228,506	1,729	3.03%			
Tax-exempt investment securities	9,552	52	2.18%	9,383	51	2.17%			
Fed funds sold and interest-earning deposits	76,203	17	0.09%	22,222	106	1.91%			
Total interest-earning assets	1,112,965	10,514	3.78%	926,539	10,108	4.36%			
Noninterest-earning assets:									
Other assets	73,721			67,935					
Allowance for loan losses	(10,076)			(7,372)					
Net unrealized losses on available-for-sale securities	(1,804)			(1,685)					
Total assets	\$1,174,806			\$985,417					
Interest-bearing liabilities:									
NOW accounts	\$ 80,712	\$ 35	0.17%	\$ 67,380	\$ 28	0.17%			
Money management accounts	15,826	4	0.10%	13,415	5	0.15%			
MMDA accounts	202,136	355	0.70%	177,284	395	0.89%			
Savings and club accounts	94,684	22	0.09%	85,283	25	0.12%			
Time deposits	418,722	1,788	1.71%	368,708	2,287	2.48%			
Subordinated loans	15,139	192	5.07%	15,102	217	5.75%			
Borrowings	87,415	478	2.19%	71,701	445	2.48%			
Total interest-bearing liabilities	914,634	2,874	1.26%	798,873	3,402	1.70%			
Noninterest-bearing liabilities:									
Demand deposits	156,001			101,675					
Other liabilities	12,828			10,395					
Total liabilities	1,083,463			910,943					
Shareholders' equity	91,343			74,474					
Total liabilities & shareholders' equity	\$1,174,806			\$985,417					
Net interest income		\$ 7,640			\$ 6,706				
Net interest rate spread			2.52%			2.66%			
Net interest margin			2.75%			2.90%			
Ratio of average interest-earning assets									
to average interest-bearing liabilities			121.68%			115.98%			

	For the six months ended June 30,							
		2020			2019			
(Dollars in thousands)	Average Balance	Interest	Average Yield / Cost	Average Balance	Interest	Average Yield / Cost		
Interest-earning assets:								
Loans	\$ 778,709	\$18,074	4.64%	\$650,169	\$15,797	4.86%		
Taxable investment securities	239,297	3,375	2.82%	226,586	3,605	3.18%		
Tax-exempt investment securities	5,458	59	2.16%	13,903	159	2.29%		
Fed funds sold and interest-earning deposits	45,943	49	0.21%	21,390	216	2.02%		
Total interest-earning assets	1,069,407	21,557	4.03%	912,048	19,777	4.34%		
Noninterest-earning assets:								
Other assets	75,263			66,878				
Allowance for loan losses	(9,390)			(7,324)				
Net unrealized losses								
on available for sale securities	(843)			(2,468)				
Total assets	\$1,134,437			\$969,134				
Interest-bearing liabilities:								
NOW accounts	\$ 78,247	\$ 65	0.17%	\$ 68,819	\$ 56	0.16%		
Money management accounts	15,005	9	0.12%	13,820	10	0.14%		
MMDA accounts	198,298	756	0.76%	180,907	829	0.92%		
Savings and club accounts	90,901	48	0.11%	84,792	50	0.12%		
Time deposits	410,967	3,882	1.89%	345,486	4,140	2.40%		
Subordinated loans	15,135	398	5.26%	15,097	434	5.75%		
Borrowings	87,217	980	2.25%	79,200	1,005	2.54%		
Total interest-bearing liabilities	895,770	6,138	1.37%	788,121	6,524	1.66%		
Noninterest-bearing liabilities:								
Demand deposits	134,179			101,480				
Other liabilities	12,446			9,383				
Total liabilities	1,042,395			898,984				
Shareholders' equity	92,042			70,150				
Total liabilities & shareholders' equity	\$1,134,437			\$969,134				
Net interest income		\$15,419			\$13,253			
Net interest rate spread			2.66%			2.68%		
Net interest margin			2.88%			2.91%		
Ratio of average interest-earning assets to average interest-bearing								
liabilities			119.38%			115.72%		

As indicated in the above tables, net interest income, before provision for loan losses, increased \$934,000, or 13.9%, to \$7.6 million for the three months ended June 30, 2020 as compared to \$6.7 million for the same prior year period. This increase was due principally to the \$186.4 million, or 20.1%, increase in the average balance of interest-earning assets, and a decrease of 58 basis points on the average yield earned on those assets. These positive factors on net interest income were partially offset by an increase in the average balance of interest-bearing liabilities of \$115.8 million, or 14.5%, and a decrease of 44 basis points on the average interest rate paid on those liabilities. In total, net interest margin decreased 15 basis points to 2.75% due largely to the decrease in yields earned on average interest-earning assets, as noted above. The following analysis should also

be viewed in conjunction with the table below which reports the changes in net interest income attributable to rate and volume.

Interest and dividend income increased \$406,000, or 4.0%, to \$10.5 million for the three months ended June 30, 2020 compared to \$10.1 million for the same three month period in 2019. The increase in interest income was due principally to the increase in average interest-earning assets (primarily loans), which increased between the year-over-year second quarter periods by 20.1%. The increase in interest income on loans was due principally to the increase in the in the average balances of loans, which increased 19.5%, between the year-over-year second quarter periods. The average balance of loans increased by \$129.8 million. The increase in the average balance of loans reflected the Company's continued success in its expansion within the greater Syracuse, New York market and the Company's participation in the PPP loan program.

Interest expense for the three months ended June 30, 2020 decreased \$528,000 or 15.5%, to \$2.9 million when compared to the same prior year period. Deposit interest expense decreased \$536,000, or 19.6%, to \$2.2 million due to a 45 basis point decrease in the annualized rate paid on deposits to 1.09% for the three months ended June 30, 2020, as compared to 1.54% for the three months ended June 30, 2019. This was partially offset by a \$100.0 million increase in the average balance of interest-bearing deposits during the same time periods. This decrease in the average cost of deposits was primarily due to a 77 basis point decrease in the average rates paid on time deposits, during the three months ended June 30, 2020 as compared to the same three month period in 2019 due to the general decline in market interest rates during the second quarter of 2020. In 2019, the average rates paid on time deposits reflected the competitive environment for such deposits within the Company's marketplace.

For the six month period ended June 30, 2020, net interest income, before the provision for loan losses, increased \$2.2 million, or 16.3%, to \$15.4 million compared to \$13.3 million for the six months ended June 30, 2019. Interest and dividend income increased \$1.8 million, or 9.0%, to \$21.6 million for the six months ended June 30, 2020 from \$19.8 million for the same six month period in 2019. The increase in interest income was due principally to the increase in average balances of federal funds sold and interest-earning deposits and loans, which increased 114.8% and 19.8%, respectively, between the year-over-year six month periods. The increase in the average balance of federal funds sold and interest-earning deposits was a result of the COVID-19 pandemic. The Bank substantially increased the liquidity of its balance sheet to support the potential needs of the customers and communities it serves. The increase in the average balance of loans reflected the Company's continued success in its expansion within the greater Syracuse market and the Company's participation in the PPP loan program. Further contributing to the increase in net interest income was a \$386,000 decrease in interest expense, primarily due to a \$325,000 decrease in deposit expense.

Interest expense for the six months ended June 30, 2020 decreased \$386,000, or 5.9%, to \$6.1 million as compared to \$6.5 million for the six months ended June 30, 2019. The decrease in interest expense was due principally to a 29 basis point decrease in the average rate paid on interest-bearing liabilities to 1.37%, partially offset by a \$107.6 million increase in the average balance of these liabilities. The decrease in interest expense was due to a \$325,000 decrease in deposit interest expense, a \$36,000 decrease in subordinated loan expense, and a \$25,000 decrease in borrowings expense. The average balance of interest-bearing deposits, which include brokered deposits, increased \$113.4 million between the year-over-year six month periods. The average rate paid on interest- bearing deposits decreased 30 basis points to 1.20% for the six months ended June 30, 2020 as compared with the same six month period in 2019. This decrease was primarily due to a 51 basis point decrease in the average rate paid on time deposits, during the six months ended June 30, 2020 as compared to the same time period in 2019. The decrease in the average rates paid on those deposits reflected the general decline in market interest rates during the first half of 2020.

Rate/Volume Analysis

Net interest income can also be analyzed in terms of the impact of changing interest rates on interest-earning assets and interest-bearing liabilities and changes in the volume or amount of these assets and liabilities. The

following table represents the extent to which changes in interest rates and changes in the volume of interest-earning assets and interest-bearing liabilities have affected the Company's interest income and interest expense during the periods indicated. Information is provided in each category with respect to: (i) changes attributable to changes in volume (change in volume multiplied by prior rate); (ii) changes attributable to changes in rate (changes in rate multiplied by prior volume); and (iii) total increase or decrease. Changes attributable to both rate and volume have been allocated ratably.

		months ended 2020 vs. 2019 ease/(Decrease))	Six months ended June 30, 2020 vs. 2019 Increase/(Decrease) Due to			
(In thousands)	Total Increase Volume Rate (Decrease)			Volume	Rate	Total Increase (Decrease)	
Interest Income:							
Loans	\$4,776	\$(4,166)	\$ 610	\$4,161	\$(1,884)	\$ 2,277	
Taxable investment securities	115	(231)	(116)	465	(695)	(230)	
Tax-exempt investment securities	1		1	(92)	(8)	(100)	
Interest-earning deposits	517	(606)	(89)	340	(507)	(167)	
Total interest income	5,409	(5,003)	406	4,874	(3,094)	1,780	
Interest Expense:							
NOW accounts	6	1	7	8	1	9	
Money management accounts	4	(5)	(1)	2	(3)	(1)	
MMDA accounts	251	(291)	(40)	176	(249)	(73)	
Savings and club accounts	13	(16)	(3)	8	(10)	(2)	
Time deposits	1,578	(2,077)	(499)	1,534	(1,792)	(258)	
Subordinated loans	4	(29)	(25)	3	(39)	(36)	
Borrowings	296	(263)	33	204	(229)	(25)	
Total interest expense	2,152	(2,680)	(528)	1,935	(2,321)	(386)	
Net change in net interest income	\$3,257	\$(2,323)	\$ 934	\$2,939	\$ (773)	\$ 2,166	

Provision for Loan Losses

We establish a provision for loan losses, which is charged to operations, at a level management believes is appropriate to absorb probable incurred credit losses in the loan portfolio. In evaluating the level of the allowance for loan losses, management considers historical loss experience, the types of loans and the amount of loans in the loan portfolio, adverse situations that may affect the borrower's ability to repay, estimated value of any underlying collateral, and prevailing economic conditions. This evaluation is inherently subjective as it requires estimates that are susceptible to significant revision as more information becomes available or as future events change. The provision for loan losses represents management's estimate of the amount necessary to maintain the allowance for loan losses at an adequate level.

Management extensively reviews recent trends in historical losses, qualitative factors and specific reserve needs on loans individually evaluated for impairment in its determination of the adequacy of the allowance for loan losses. We recorded \$1.1 million in provision for loan losses for the three month period ended June 30, 2020, as compared to \$610,000 for the three month period ended June 30, 2019. The \$536,000 increase in the provision for loan losses for the second quarter of 2020, as compared to the same quarter in 2019, resulted from year-over-year increases in: (1) the qualitative factors used in determining the adequacy of the allowance for loan losses, (2) the size of the loan portfolio, and (3) delinquent and nonaccrual loans. The increase in the quantitative factors used in determining the provision for loan losses reflects the substantial increase in economic uncertainty and the resultant potential for increased credit losses in future periods as a consequence of the COVID-19

pandemic. Outstanding loan balances increased \$113.2 million, or 16.3%, in the quarter ended June 30, 2020, as compared to the same quarter in the previous year, and therefore required a corresponding increase in the estimable and probable loan losses inherent in the loan portfolio. Finally, the provision for loan losses in the quarter ended June 30, 2020 was further increased, as compared to the same quarter in 2019, by the effects of an increase in the ratio of delinquent loans to total loans, which increased to 3.19% at June 30, 2020 as compared to 2.45% at June 30, 2019, coupled with an increase in nonaccrual loans that increased \$4.6 million to \$8.4 million at June 30, 2020 as compared to \$3.8 million at June 30, 2019.

For the first six months of 2020, we recorded \$2.2 million in provision for loan losses as compared to \$754,000 in the same prior year six month period. This \$1.5 million increase in the provision for loan losses resulted from year-over-year increases in: (1) the qualitative factors used in determining the adequacy of the allowance for loan losses, (2) the size of the loan portfolio, and (3) delinquent and nonaccrual loans. The increase in the quantitative factors used in determining the provision for loan losses reflects the substantial increase in economic uncertainty and the resultant potential for increased credit losses in future periods as a consequence of the COVID-19 pandemic.

The Company measures delinquency based on the amount of past due loans as a percentage of total loans. The ratio of delinquent loans to total loans increased to 3.19% at June 30, 2020 as compared to 2.09% at December 31, 2019. Delinquent loans (numerator) increased \$9.5 million while total loan balances (denominator) increased \$26.5 million at June 30, 2020, as compared to December 31, 2019. The increase in past due loans was primarily driven by an increase of \$6.8 million in loans delinquent 60-89 days, an increase of \$2.9 million in loans delinquent more than 90 days, partially offset by a \$210,000 decrease in loans delinquent 30-59 days. The increase in loans 60-89 days past due at June 30, 2020 as compared to December 31, 2019 was primarily due to the addition of nine commercial loans totaling \$6.6 million. The increase in loans delinquent 90 days or more at June 30, 2020 as compared to December 31, 2019 was primarily due to the addition of six commercial loans totaling \$3.2 million.

At June 30, 2020, there were \$25.8 million in loans past due including \$9.6 million in loans 30-59 days past due, \$8.2 million in loans 60-89 days past due and \$8.0 million in loans 90 or more days past due. At December 31, 2019, there were \$16.3 million in loans past due including \$9.7 million in loans 30-59 days past due, \$1.4 million in loans 60-89 days past due and \$5.2 million in loans 90 or more days past due.

Noninterest Income

The Company's noninterest income is primarily comprised of fees on deposit account balances and transactions, loan servicing, commissions, including insurance agency commissions, and net gains on sales of securities, loans, and foreclosed real estate.

The following table sets forth certain information on noninterest income for the periods indicated:

	Three months ended June 30,					Six months	ended June 30),
(Dollars in thousands)	2020	2019	Ch	ange	2020	2019	Ch	ange
Service charges on deposit accounts	\$ 303	\$ 348	\$ (45)	-12.9%	\$ 659	\$ 630	\$ 29	4.6%
Earnings and gain on bank owned life insurance	106	101	5	5.0%	222	222	_	0.0%
Loan servicing fees	79	60	19	31.7%	128	87	41	47.1%
Debit card interchange fees	205	187	18	9.6%	368	331	37	11.2%
Insurance agency revenue	185	218	(33)	-15.1%	522	461	61	13.2%
Other charges, commissions and fees	255	244	11	4.5%	478	408	70	17.2%
Noninterest income before gains (losses)	1,133	1,158	(25)	-2.2%	2,377	2,139	238	11.1%
Net gains on sales and redemptions of investment securities	1,023	32	991	3096.9%	1,049	111	938	845.0%
(Losses) gains on marketable equity securities	(722)	16	(738)	-4612.5%	(916)	57	(973)	-1707.0%
Net gains on sales of loans and foreclosed real estate	97	13	84	-646.2%	769	5	764	15280.0%
Total noninterest income	\$1,531	\$1,219	\$ 312	25.6%	\$3,279	\$2,312	\$ 967	41.8%

The \$312,000, or 25.6%, increase in noninterest income in the quarter ended June 30, 2020, as compared to the same quarterly period in 2019, was primarily the result of a \$253,000 increase in income from the combined investment related activities of (1) net gains on sales and redemptions of investment securities and (2) net losses on equity securities. During the second quarter of 2020, net gains on sales and redemptions of investment securities increased \$991,000, as compared to the previous year period, and this increase was partially offset by a \$738,000 decline in gains on equity securities, compared to the second quarter of 2019. Further contributing to the increase in noninterest income was a net increase of \$84,000 in net gains on sales of loans and foreclosed real estate for the current period.

Excluding the effects of the quarter over quarter fluctuations discussed above, all other noninterest income categories decreased by \$25,000, or 2.2%, in the three months ended June 30, 2020, as compared to the same prior year period. The overall increases in noninterest income were significantly muted in the second quarter of 2020 by reduced customer transactional activity levels and the Bank's increased levels of fee waivers and other forbearances in response to the local economic effects of the COVID-19 pandemic.

The \$967,000, or 41.8%, increase in noninterest income for the six months ended June 30, 2020, when compared to the same six month period in 2019, was primarily the result of an increase of \$938,000 in net gains on sales and redemptions of investment securities, and a \$764,000 increase in net gains on the sales of loans and foreclosed real estate. The investment securities sales were part of the Company's portfolio optimization and liquidity management strategies. The increased gain on the sales of loans and foreclosed real estate was primarily the result of the sale of \$35.9 million in seasoned, conforming residential mortgage loans that was completed in January 2020 and resulted in the recognition of a gain of \$659,000. These increases in noninterest income were partially offset by a \$973,000 increase in net losses on equity securities, as discussed above.

Excluding the effects of the period over period fluctuations discussed above all other noninterest income categories increased in the aggregate by \$238,000, or 11.1%, to \$2.4 million in the six months ended June 30,

2020 as compared with \$2.1 million in the same six month period of 2019. This \$238,000 period over period increase in noninterest income was due primarily to increases in other charges, commissions and fees, insurance agency revenue, debit card interchange fees, loan servicing fees, and service charges on deposit accounts, which increased \$70,000, \$61,000, \$37,000, \$41,000, and \$29,000, respectively. The net increase in these categories of noninterest income were in part due to the Company's increased strategic focus on improving recurring noninterest income. However, as noted above, overall increases in noninterest income were significantly muted in the second quarter of 2020 by reduced customer activity levels and the Bank's increased levels of fee waivers and forbearances in response to the local economic effects of the COVID-19 pandemic.

Noninterest Expense

The following table sets forth certain information on noninterest expense for the periods indicated:

	Three months ended June 30,					Six months en	ded June 30,	
(Dollars in thousands)	2020	2019	Chai	nge	2020	2019	Chang	ge
Salaries and employee benefits	\$2,972	\$3,454	\$(482)	-14.0%	\$ 6,219	\$ 7,104	\$ (885)	-12.5%
Building and occupancy	707	632	75	11.9%	1,461	1,287	174	13.5%
Data processing	552	587	(35)	-6.0%	1,152	1,162	(10)	-0.9%
Professional and other services	301	380	(79)	-20.8%	617	716	(99)	-13.8%
Advertising	261	242	19	7.9%	437	481	(44)	-9.1%
FDIC assessments	150	130	20	15.4%	339	241	98	40.7%
Audits and exams	125	100	25	25.0%	250	200	50	25.0%
Insurance agency expense	212	229	(17)	-7.4%	404	428	(24)	-5.6%
Community service activities	12	144	(132)	-91.7%	119	282	(163)	-57.8%
Foreclosed real estate expenses	5	59	(54)	-91.5%	35	296	(261)	-88.2%
Other expenses	461	582	(121)	-20.8%	970	1,053	(83)	-7.9%
Total noninterest expenses	\$5,758	\$6,539	\$(781)	-11.9%	\$12,003	\$13,250	\$(1,247)	-9.4%

The \$781,000, or 11.9%, decrease in noninterest expense between the year-over-year second quarter periods was principally due to a decrease in salaries and employee benefits expense of \$482,000, or 14.0%. All other noninterest expenses in aggregate increased \$299,000, or 9.7%, for the three months ended June 30, 2020 as compared to the same three month period in 2019. The detail of the components of the overall decrease in noninterest expense is as follows:

- The \$482,000 decrease in personnel expenses, was primarily due to a \$359,000 decrease in net salaries expense, which was partially the result of a significant absorption of these expenses into the unamortized cost of the originated PPP loans as required under GAAP. During the quarter, the Bank originated \$73.8 million in PPP loans and deferrals of employee-related expenses related to those originations resulted in an overall net decrease of \$331,000 in employee-related expenses for the quarter, as compared to the second quarter 2019.
- The \$132,000 decrease in community service activities was a result of significant restrictions placed on many business activities as a result of the pandemic and an associated decrease in community-sponsored events and activities.
- The \$121,000 decrease in other expenses was primarily due to a decrease in travel and training expense and meals and entertainment expense, which decreased \$93,000 and \$44,000, respectively. These expenses were substantially curtailed in the period as a result of the significant restrictions placed on many business activities as a result of the pandemic.
- All other noninterest expenses decreased in aggregate in the year-over-year three month periods by a total of \$46,000, or 2.0%, due to a broad range of individually immaterial variances.

The \$1.2 million, or 9.4%, decrease in noninterest expenses between the six month period ended June 30, 2020 and the same six month period in the prior year was principally due to a decrease in salaries and employee benefits expense, foreclosed real estate expense, and community service activities. The detail of the components of the overall decrease in noninterest expense is as follows:

- The \$885,000 decrease in salaries and employee benefits expense in the first six months of 2020, as compared to the same six month period in 2019, primarily resulted from the increased deferral of these expenses into the unamortized cost of the loans originated in the first six months of 2020. The increased volume of loans originated in the first six months of 2020, as compared to the same period in 2019, was due primarily to the PPP loan volume originated in the second quarter of 2020, as discussed above. In addition, personnel expenses declined in the six months ended June 30, 2020, as compared to the same period in 2019, due primarily to decreases of \$319,000 in employee benefits. The decrease in other employee benefits for the six months ended June 30, 2020, as compared to the same six month period in 2019, was primarily due to decreases in pension, employee medical and other employee benefits expenses of \$144,000, \$76,000 and \$49,000, respectively. Pension expense decreased \$144,000 primarily due to the higher market value of pension assets held in trust at January 1, 2020 as compared to the same date in 2019. The higher market values for pension assets resulted from market value appreciation of those assets in 2019. Medical expenses declined primarily due to reduced employee utilization of elective medical services and increased cost sharing of certain medical costs with employees in 2020, as compared to the previous year. The decrease in other employee benefits expenses related to reduced levels of certain training, employee recognition and other employee-related activities due primarily to restrictions on such activities resulting from the pandemic.
- Foreclosed real estate expenses decreased \$261,000 as a result of a foreclosed property that the Bank paid taxes on in 2019. This foreclosed property was sold in February 2019.
- The \$163,000 decrease in community service activities was a result of significant restrictions placed on many business activities as a result of the pandemic and an associated decrease in community-sponsored events and activities.
- All other noninterest expenses increased in aggregate in the year-over-year six month periods by a total of \$62,000, or 1.1%, due to a broad range of individually immaterial variances.

At June 30, 2020, the Bank serviced 476 residential mortgage loans in the aggregate amount of \$48.8 million that have been sold on a non-recourse basis to FNMA. FNMA is the only unrelated third-party that has acquired loans originated by the Bank. On an infrequent basis, loans previously sold to FNMA that subsequently default may be found to have underwriting defects that place the loans out of compliance with the representations and warranties made by the Bank. This can occur at any time while the loan is outstanding. In such cases, the Bank is required to repurchase the defaulted loans from FNMA. Repurchase losses sustained by the Bank include all costs incurred by FNMA as part of the foreclosure process, including items such as delinquent property taxes and legal fees. Management continues to monitor the underwriting standards applied to all residential mortgage loan originations and subsequent sales through its quality control processes and considers these occurrences and their related expenses to be isolated instances.

Income Tax Expense

Income tax expense increased \$264,000 to \$439,000, with an effective tax rate of 19.2%, for the quarter ended June 30, 2020, as compared to \$175,000, with an effective tax rate of 22.2%, for the same three month period in 2019. The increase in income tax expense in the current quarter, as compared to the same quarter in 2019, was primarily attributable to the year-over-year second quarter increase in pre-tax net income.

Income tax expense increased \$468,000 to \$894,000, with an effective tax rate of 20.5% for the six months ended June 30, 2020 as compared to \$426,000, with an effective tax rate of 27.8%, for the same six month period in 2019. Effective in January 2018, the Company adopted a modification methodology affecting how the

Company the Company's state income tax liability is computed. Under this adopted methodology it is unlikely that the Company will pay income taxes to New York in future periods. It was therefore determined to be probable that the Company's deferred tax assets related to New York State income taxes were unlikely to further reduce the Company's state income tax rate in the future. Accordingly, a valuation allowance against the value of those deferred tax assets was established to reduce the net deferred tax asset related to New York income taxes to \$0. As a result, in the quarter ended March 31, 2019, the Company established, through a charge to earnings, a valuation allowance in the amount of \$136,000. This charge to earnings increased the Company's effective tax rate by 18.3% in that period. In the quarter, ended March 31, 2020, management further evaluated all factors related to the expected filings of future New York State tax returns and elected to eliminate its remaining New York State net deferred tax asset balances and the related and offsetting valuation allowance on January 1, 2020. The effect of these eliminations required an adjustment to other comprehensive income balances and had no effect on the first six months of 2020 reported earnings. At June 30, 2020 and June 30, 2019, the Company's net deferred tax asset related to New York income taxes was \$0.

The Company's effective tax rate differs from the statutory federal tax rate of 21% due primarily to tax-exempt income from specific types of investment securities and loans, bank owned life insurance, and, to a much lesser degree, the utilization of low-income housing credits. In addition, the tax effects of certain incentive stock option activity may also reduce the Company's effective tax rate on a sporadic basis. During the six months ended June 30, 2020, these effects reduced the Company's effective tax rate by 0.2%. Excluding the nonrecurring charge related to the deferred tax asset valuation allowance, income tax expense in the first half of 2020 would have been \$604,000 more than the same prior year period. The increase in income tax expense, as compared to the previous year's same period, was primarily attributable to the year-over-year first half increase in pre-tax net income.

Earnings per Share

Basic and diluted earnings per share were \$0.31 per share for the second quarter of 2020, as compared to \$0.11 per basic and diluted share for the same quarter of 2019.

Basic and diluted earnings per share were \$0.60 for the six month period ended June 30, 2020, as compared to \$0.23 for the same prior year period. The increase in earnings per share between these two periods was due to the increase in net income between these two time periods.

Changes in Financial Condition

Assets

Total assets increased \$73.2 million, or 6.7%, to \$1.2 billion at June 30, 2020 as compared to \$1.1 billion at December 31, 2019. This increase was due primarily to increases in loans, cash and cash equivalents, and investment securities.

Total net loans receivable increased \$22.7 million, or 2.9%, to \$795.5 million at June 30, 2020 from \$772.8 million at December 31, 2019. The increase was primarily the result of an increase of \$75.9 million in commercial loans between these two dates, partially offset by decreases in residential mortgage loans and consumer loans of \$32.9 million and \$16.5 million, respectively. Commercial loans increased primarily due to increases of \$73.8 million in PPP loans and \$6.6 million in commercial real estate loans. This was reflective of high levels of participation in the government relief program, organic loan growth and the Company's continued success in its expansion within the greater Syracuse, New York market. The decrease in the residential mortgage loans was primarily the result of the sale of \$35.9 million in seasoned conforming residential mortgage loans in the first quarter of 2020, which generated a \$680,000 gain. The decrease in consumer loans was primarily due to general amortization.

Cash and cash equivalents increased \$25.0 million, or 123.8%, to \$45.1 million at June 30, 2020, as compared to \$20.2 million at December 31, 2019. The \$25.0 million increase in cash and cash equivalents was

primarily due to the ongoing COVID-19 pandemic; as a result, the Bank has substantially increased the liquidity of its balance sheet to support the potential needs of its customers and communities. Total restricted cash was \$1.6 million and -\$0- at June 30, 2020 and December 31, 2019, respectively.

Investment securities increased \$24.3 million, or 10.4%, to \$259.0 million at June 30, 2020, as compared to \$234.7 million at December 31, 2019, due principally to purchases of securities during the first six months of 2020.

Liabilities

Total liabilities increased \$71.3 million, or 7.1%, to \$1.1 billion at June 30, 2020 compared to \$1.0 billion at December 31, 2019. Deposits increased \$88.7 million, or 10.1%, to \$970.6 million at June 30, 2020, compared to \$881.9 million at December 31, 2019. The increase in deposits was due to growth in retail and commercial relationship deposits along with brokered deposit inflows, as a result of the Bank's efforts to significantly increase cash and cash equivalent balances in response to the COVID-19 pandemic. Noninterest-bearing deposits were \$160.1 million at quarter end, compared with \$107.5 million on December 31, 2019. Second quarter noninterest-bearing deposits increased by \$46.6 million from March 31, 2020, primarily as a result of the Bank's participation in the PPP lending program, as well as ongoing growth in business banking relationships. Borrowed funds balances from the FHLB-NY decreased \$17.7 million, or 19.0%, to \$75.4 million at June 30, 2020 from \$93.1 million at December 31, 2019.

Shareholders' Equity

The Company's shareholders' equity, exclusive of the noncontrolling interest, increased \$1.9 million, or 2.1%, to \$92.3 million at June 30, 2020, from \$90.4 million at December 31, 2019. This increase was principally due to a \$2.8 million increase in retained earnings, a \$385,000 increase in additional paid in capital and a \$90,000 increase in ESOP shares earned, offset by a \$1.4 million decrease in comprehensive income. Comprehensive income decreased primarily as the result of losses on derivatives and hedging activities during the six month period. The increase in retained earnings resulted from \$3.6 million in net income recorded in the first six months of 2020. Partially offsetting this increase in retained earnings were \$557,000 for cash dividends declared on our common stock, \$138,000 for cash dividends declared on our preferred stock, and \$15,000 for cash dividends declared on our issued warrant.

Capital

Capital adequacy is evaluated primarily by the use of ratios which measure capital against total assets, as well as against total assets that are weighted based on defined risk characteristics. The Company's goal is to maintain a strong capital position, consistent with the risk profile of its banking operations. This strong capital position serves to support growth and expansion activities while at the same time exceeding regulatory standards. At June 30, 2020, the Bank met the regulatory definition of a "well-capitalized" institution, i.e. a leverage capital ratio exceeding 5%, a Tier 1 risk-based capital ratio exceeding 8%, Tier 1 common equity exceeding 6.5%, and a total risk-based capital ratio exceeding 10%.

In addition to establishing the minimum regulatory capital requirements, the regulations limit capital distributions and certain discretionary bonus payments to management if the institution does not hold a "capital conservation buffer" consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets above the amount necessary to meet its minimum risk-based capital requirements. The buffer is separate from the capital ratios required under the Prompt Corrective Actions ("PCA") standards. In order to avoid these restrictions, the capital conservation buffer effectively increases the minimum levels of the following capital to risk-weighted assets ratios: (1) Core Capital, (2) Total Capital and (3) Common Equity. The capital conservation buffer requirement is now fully implemented at 2.5% of risk-weighted assets. At June 30, 2020, the Bank exceeded all regulatory required minimum capital ratios, including the capital buffer requirements.

As a result of the Economic Growth, Regulatory Relief, and Consumer Protection Act, the federal banking agencies developed a "Community Bank Leverage Ratio" (the ratio of a bank's tier 1 capital to average total consolidated assets) for financial institutions with assets of less than \$10 billion. A "qualifying community bank" that exceeds this ratio will be deemed to be in compliance with all other capital and leverage requirements, including the capital requirements to be considered "well capitalized" under Prompt Corrective Action statutes. The federal banking agencies may consider a financial institution's risk profile when evaluating whether it qualifies as a community bank for purposes of the capital ratio requirement. The federal banking agencies have set the Community Bank Leverage Ratio at 9%. Pursuant to the CARES Act, the federal banking agencies in April 2020 issued interim final rules to set the Community Bank Leverage Ratio at 8% beginning in the second quarter of 2020 through the end of 2020. Beginning in 2021, the Community Bank Leverage Ratio will increase to 8.5% for the calendar year. Community banks will have until January 1, 2022, before the Community Bank Leverage Ratio requirement will return to 9%. A financial institution can elect to be subject to this new definition. The new rule took effect on January 1, 2020. The Bank did not elect to become subject to the Community Bank Leverage Ratio.

Pathfinder Bank's capital amounts and ratios as of the indicated dates are presented in the following tables:

					Minimu Be			
					"We			
			Minimur		Capital		Minimu	
			Capit Adegu		Under P Correc		Capi Adequ	
	Actua	ıl	Purpos		Provis		with B	
(Dollars in thousands)	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
<u>As of June 30, 2020</u> :								
Total Core Capital (to Risk-Weighted Assets)	\$105,603	12.64%	\$66,848	8.00%	\$83,561	10.00%	\$87,739	10.50%
Tier 1 Capital (to Risk-Weighted Assets)	\$ 95,157	11.39%	\$50,136	6.00%	\$66,848	8.00%	\$71,026	8.50%
Tier 1 Common Equity (to Risk-Weighted Assets)	\$ 95,157	11.39%	\$37,602	4.50%	\$54,314	6.50%	\$58,492	7.00%
Tier 1 Capital (to Assets)	\$ 95,157	8.17%	\$46,607	4.00%	\$58,259	5.00%	\$58,259	5.00%
As of December 31, 2019:								
Total Core Capital (to Risk-Weighted Assets)	\$ 95,093	12.28%	\$61,934	8.00%	\$77,418	10.00%	\$81,289	10.50%
Tier 1 Capital (to Risk-Weighted Assets)	\$ 86,424	11.16%	\$46,451	6.00%	\$61,934	8.00%	\$65,805	8.50%
Tier 1 Common Equity (to Risk-Weighted Assets)	\$ 86,424	11.16%	\$34,838	4.50%	\$50,322	6.50%	\$54,192	7.00%
Tier 1 Capital (to Assets)	\$ 86,424	8.20%	\$42,175	4.00%	\$52,719	5.00%	\$52,719	5.00%

Non-GAAP Financial Measures

Regulation G, a rule adopted by the Securities and Exchange Commission (SEC), applies to certain SEC filings, including earnings releases, made by registered companies that contain "non-GAAP financial measures." GAAP is generally accepted accounting principles in the United States of America. Under Regulation G, companies making public disclosures containing non-GAAP financial measures must also disclose, along with each non-GAAP financial measure, certain additional information, including a reconciliation of the non-GAAP financial measure to the closest comparable GAAP financial measure (if a comparable GAAP measure exists) and a statement of the Company's reasons for utilizing the non-GAAP financial measures as part of its financial disclosures. The SEC has exempted from the definition of "non-GAAP financial measures" certain commonly used financial measures that are not based on GAAP. When these exempted measures are included in public disclosures, supplemental information is not required. Financial institutions like the Company and its subsidiary bank are subject to an array of bank regulatory capital measures that are financial in nature but are not based on

GAAP. The Company follows industry practice in disclosing its financial condition under these various regulatory capital measures, including period-end regulatory capital ratios for its subsidiary bank, in its periodic reports filed with the SEC. The Company provides, below, an explanation of the calculations, as supplemental information, for non-GAAP measures included in the consolidated annual financial statements. In addition, the Company provides a reconciliation of its subsidiary bank's disclosed regulatory capital measures, below.

(Dollars in thousands)	June 30, 2020	December 31, 2019
Regulatory Capital Ratios (Bank Only)		2013
Total capital (to risk-weighted assets)		
Total equity (GAAP)	\$ 95,447	\$ 88,138
Goodwill	(4,536)	(4,536)
Intangible assets	(141)	(149)
Addback: Accumulated other comprehensive income	4,387	2,971
Total Tier 1 Capital	\$ 95,157	\$ 86,424
Allowance for loan and lease losses	10,446	8,669
Total Tier 2 Capital	\$ 10,446	\$ 8,669
Total Tier 1 plus Tier 2 Capital (numerator)	\$ 105,603	\$ 95,093
Risk-weighted assets (denominator)	835,605	774,177
Total core capital to risk-weighted assets	12.64%	12.28%
• •		
Tier 1 capital (to risk-weighted assets)		
Total Tier 1 capital (numerator)	\$ 95,157	\$ 86,424
Risk-weighted assets (denominator)	835,605	774,177
Total capital to risk-weighted assets	11.39%	11.16%
Tier 1 capital (to adjusted assets)		
Total Tier 1 capital (numerator)	\$ 95,157	\$ 86,424
Total average assets	1,169,861	1,059,060
Goodwill	(4,536)	(4,536)
Intangible assets	(141)	(149)
Adjusted assets (denominator)	\$1,165,184	\$1,054,375
Total capital to adjusted assets	8.17%	8.20%
Tier 1 Common Equity (to risk-weighted assets)		
Total Tier 1 capital (numerator)	\$ 95,157	\$ 86,424
Risk-weighted assets (denominator)	835,605	774,177
Total Tier 1 Common Equity to risk-weighted assets	11.39%	11.16%
Total Tier I Common Equity to flow weighted assets	11.00/0	11.10/0

Loan and Asset Quality and Allowance for Loan Losses

The following table represents information concerning the aggregate amount of non-performing assets at the indicated dates:

(Dollars In thousands)	June 30,	December 31,	June 30,
Nonaccrual loans:	2020	2019	2019
Commercial and commercial real estate loans	\$6,807	\$ 3,002	\$2,470
Consumer	540	631	367
Residential mortgage loans	1,038	1,613	918
Total nonaccrual loans	8,385	5,246	3,755
Total nonperforming loans	8,385	5,246	3,755
Foreclosed real estate	26	88	591
Total nonperforming assets	\$8,411	\$ 5,334	\$4,346
Accruing troubled debt restructurings	\$2,020	\$ 2,008	\$2,860
Nonperforming loans to total loans	1.04%	0.67%	0.54%
Nonperforming assets to total assets	0.72%	0.49%	0.43%

Nonperforming assets include nonaccrual loans, nonaccrual troubled debt restructurings ("TDR"), and foreclosed real estate ("FRE"). The Company generally places a loan on nonaccrual status and ceases accruing interest when loan payment performance is deemed unsatisfactory and the loan is past due 90 days or more. There are no loans that are past due 90 days or more and still accruing interest. Loans are considered modified in a TDR when, due to a borrower's financial difficulties, the Company makes a concession(s) to the borrower that it would not otherwise consider. These modifications may include, among others, an extension of the term of the loan, and granting a period when interest-only payments can be made, with the principal payments made over the remaining term of the loan or at maturity. TDRs are included in the above table within the categories of nonaccrual loans or accruing TDRs. There was one nonaccruing TDR loan, with an aggregate carrying value of \$74,000 included among the nonaccrual loans detailed in the table above at June 30, 2020.

Pursuant to the CARES Act, financial institutions have the option to temporarily suspend certain requirements under U.S. generally accepted accounting principles related to troubled debt restructurings for a limited period of time to account for the effects of COVID-19. This provision allows a financial institution the option to not apply the guidance on accounting for troubled debt restructurings to loan modifications, such as extensions or deferrals, related to COVID-19 made between March 1, 2020 and the earlier of (i) December 31, 2020 or (ii) 60 days after the end of the COVID-19 national emergency. The relief can only be applied to modifications for borrowers that were not more than 30 days past due as of December 31, 2019. The Bank elected to adopt these provisions of the CARES Act.

As indicated in the table above, nonperforming assets at June 30, 2020 were \$8.4 million and were \$3.1 million higher than the \$5.3 million reported at December 31, 2019, due primarily to an increase of \$3.8 million in nonperforming commercial and commercial real estate loans. This increase was partially offset by a decrease of \$575,000 in nonperforming residential mortgage loans, a \$91,000 decrease in nonperforming consumer loans, and a \$62,000 decrease in FRE

As indicated in the nonperforming asset table above, FRE balances decreased \$62,000 to \$26,000 at June 30, 2020 from \$88,000 at December 31, 2019, following two sales from the portfolio and two additions to the portfolio during the six-month period ended June 30, 2020.

Fair values for commercial FRE are initially recorded based on market value evaluations by third parties, less costs to sell ("initial cost basis"). On a prospective basis, residential FRE assets will be initially recorded at

the lower of the net amount of loan receivable or the real estate's fair value less costs to sell. Any write-downs required when the related loan receivable is exchanged for the underlying real estate collateral at the time of transfer to FRE are charged to the allowance for loan losses. Values are derived from appraisals, similar to impaired loans, of underlying collateral or discounted cash flow analysis. Subsequent to foreclosure, valuations are updated periodically and assets are marked to current fair value, not to exceed the initial cost basis for the FRE property.

The allowance for loan losses represents management's estimate of the probable losses inherent in the loan portfolio as of the date of the statement of condition. The allowance for loan losses was \$10.6 million and \$8.7 million at June 30, 2020 and December 31, 2019, respectively. The ratio of the allowance for loan losses to total loans increased 20 basis points to 1.31% at June 30, 2020 from 1.11% at December 31, 2019. Management performs a quarterly evaluation of the allowance for loan losses based on quantitative and qualitative factors and has determined that the current level of the allowance for loan losses is adequate to absorb the losses in the loan portfolio as of June 30, 2020.

The Company considers a loan impaired when, based on current information and events, it is probable that the Company will be unable to collect the scheduled payments of principal and interest when due according to the contractual terms of the loan. The measurement of impaired loans is generally based upon the fair value of the collateral, with a portion of the impaired loans measured based upon the present value of future cash flows discounted at the historical effective interest rate. A specific reserve is established for an impaired loan if its carrying value exceeds its estimated fair value. The estimated fair values of the majority of the Company's impaired loans are measured based on the estimated fair value of the loan's collateral. For loans secured by real estate, estimated fair values are determined primarily through third-party appraisals or broker price opinions. When a loan is determined to be impaired, the Bank will reevaluate the collateral which secures the loan. For real estate, the Company will obtain a new appraisal or broker's opinion whichever is considered to provide the most accurate value in the event of sale. An evaluation of equipment held as collateral will be obtained from a firm able to provide such an evaluation. Collateral will be inspected not less than annually for all impaired loans and will be reevaluated not less than every two years. Appraised values and broker opinion values are discounted due to the market's perception of a reduced price of Bank-owned property and the Bank's desire to sell the property more quickly to arrive at the estimated selling price of the collateral, which is considered to be the estimated fair value. The discounts also include estimated costs to sell the property.

At June 30, 2020 and December 31, 2019, the Company had \$7.8 million and \$7.5 million in loans, respectively, which were deemed to be impaired, having established specific reserves of \$1.0 million and \$830,000, respectively, on these loans. The increase in impaired loans between these two dates was primarily driven by increases of \$215,000 and \$127,000, in impaired commercial real estate loans and other commercial and industrial loans. The \$190,000 increase in specific reserves for impaired loans at June 30, 2020 as compared to December 31, 2019 was primarily due to a \$157,000 increase in specific reserves for other commercial and industrial loans and a \$56,000 increase in specific reserves for residential real estate loans.

Management has identified potential credit problems which may result in the borrowers not being able to comply with the current loan repayment terms and which may result in those loans being included in future impaired loan reporting. Potential problem loans totaled \$32.3 million as of June 30, 2020, an increase of \$847,000, or 2.7%, as compared to \$31.5 million at December 31, 2019. These loans have been internally classified as special mention, substandard, or doubtful, yet are not currently considered impaired. Due to the adverse economic impacts of the COVID-19 pandemic on our market area and our customers, the Company expects that potential problem loans may increase during the course of fiscal 2020.

Appraisals are obtained at the time a real estate secured loan is originated. For commercial real estate held as collateral, the property is inspected every two years.

In the normal course of business, the Bank has infrequently sold residential mortgage loans and participation interests in commercial loans. As is typical in the industry, the Bank makes certain representations and warranties

to the buyer. The Bank maintains a quality control program for closed loans and considers the risks and uncertainties associated with potential repurchase requirements to be minimal.

Liquidity

Liquidity management involves the Company's ability to generate cash or otherwise obtain funds at reasonable rates to support asset growth, meet deposit withdrawals, maintain reserve requirements, and otherwise operate the Company on an ongoing basis. The Company's primary sources of funds are deposits, borrowed funds, amortization and prepayment of loans and maturities of investment securities and other short-term investments, and earnings and funds provided from operations. While scheduled principal repayments on loans are a relatively predictable source of funds, deposit flows and loan prepayments are greatly influenced by general interest rates, economic conditions and competition. The Company manages the pricing of deposits to maintain a desired deposit composition and balance. In addition, the Company invests excess funds in short-term interest-earning and other assets, which provide liquidity to meet lending requirements.

The Company's liquidity has been enhanced by its ability to borrow from the FHLBNY, whose competitive advance programs and lines of credit provide the Company with a safe, reliable, and convenient source of funds. A significant decrease in deposits in the future could result in the Company having to seek other sources of funds for liquidity purposes. Such sources could include, but are not limited to, additional borrowings, brokered deposits, negotiated time deposits, the sale of "available-for-sale" investment securities, the sale of securitized loans, or the sale of whole loans. Such actions could result in higher interest expense and/or losses on the sale of securities or loans.

Through the first six months of 2020, as indicated in the consolidated statement of cash flows, the Company reported net cash flows from operating activities of \$40.3 million and net cash outflows of \$85.9 million related to investing activities. The net cash outflows from investing activities primarily was due to a net \$61.0 million increase in loan balances, combined with a \$24.8 million increase in all other investing activities in aggregate. The Company reported net cash flows from financing activities of \$70.5 million generated principally by increased deposit balances of \$60.6 million, and increased brokered deposits balances of \$28.1 million, partially offset by an aggregate decrease in net cash of \$17.6 million from all other financing sources, including dividends paid to common shareholders of \$567,000.

The Company has a number of existing credit facilities available to it. At June 30, 2020, total credit available to the Company under the existing lines of credit was approximately \$137.7 million at FHLBNY, the Federal Reserve Bank, and two other correspondent banks. As of June 30, 2020, the Company had \$75.4 million of the available lines of credit utilized on its existing lines of credit with \$62.3 million available.

The Asset Liability Management Committee of the Company is responsible for implementing the policies and guidelines for the maintenance of prudent levels of liquidity. As of June 30, 2020, management reported to the Board of Directors that the Company is in compliance with its liquidity policy guidelines.

Off-Balance Sheet Arrangements

The Company is also a party to financial instruments with off-balance sheet risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit and standby letters of credit. At June 30, 2020, the Company had \$159.3 million in outstanding commitments to extend credit and standby letters of credit.

Additional Financial Tables at and for the six months ended June 30, 2020

The following table sets forth the composition of our loan portfolio, including net deferred costs, in dollar amount and as a percentage of loans at June 30, 2020. At June 30, 2020, we had \$292,000 of loans in process, \$1.8 million of deferred loan fees (costs), and no loans held for sale.

(Dollars in thousands)	At June 3	30, 2020
Residential real estate	\$215,757	26.8%
Commercial real estate	259,351	32.2%
Commercial and tax exempt	218,095	27.0%
Home equity and junior liens	42,891	5.3%
Consumer loans	69,915	8.7%
Total loans receivable	\$806,009	100.0%

The following table sets forth the allocation of allowance for loan losses by loan category at June 30, 2020. The allocation of the allowance by category is not necessarily indicative of future losses and does not restrict the use of the allowance to absorb losses in any category.

	At	June 30, 2020
	Allocation	Percent of
	of the	Loans to
(Dollars in thousands)	Allowance	Total Loans
Residential real estate	\$ 756	26.8%
Commercial real estate	4,258	32.2%
Commercial and tax exempt	3,275	27.0%
Home equity and junior liens	644	5.3%
Consumer loans	1,055	8.7%
Unallocated	565	0.0%
Total	\$ 10,553	100.0%

The following table sets forth the allowance for loan losses for the six months ended June 30, 2020 and 2019 and related ratios:

	For the six months ended June 30,	For the six months ended June 30,
(Dollars In thousands)	2020	2019
Balance at beginning of period	\$ 8,669	\$ 7,306
Provisions charged to operating expenses	2,213	754
Recoveries of loans previously charged-off:		
Commercial real estate and loans	2	_
Consumer and home equity	63	15
Residential real estate	1	1
Total recoveries	66	16
Loans charged off:	· · · · · · · · · · · · · · · · · · ·	
Commercial real estate and loans	(57)	(133)
Consumer and home equity	(213)	(107)
Residential real estate	(125)	(11)
Total charged-off	(395)	(251)
Net charge-offs	(329)	(235)
Balance at end of period	\$ 10,553	\$ 7,825
Net charge-offs to average loans outstanding	0.08%	0.07%
Allowance for loan losses to period-end loans	1.31%	1.13%

The following table sets forth the scheduled maturities, amortized cost, fair values and average yields for the Company's investment securities at June 30, 2020. Average yield is calculated on the amortized cost to

maturity. Adjustable rate mortgage-backed securities are included in the period in which interest rates are next scheduled to be reset. The yield information disclosed below does not give effect to changes in fair value that are reflected in accumulated other comprehensive loss in consolidated shareholders' equity.

Available for Sale

	One Yea	r or Less	More Tl to Five			han Five 1 Years
(Dollars in thousands)	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Annualized Weighted Avg Yield
Debt investment securities:						
US Treasury, agencies and GSEs	\$ 14,996	0.14%	\$ —	_	\$ 6,588	1.99%
State and political subdivisions	170	1.70%	_	_	_	_
Corporate	534	3.56%	6,675	2.26%	3,915	4,60%
Asset backed securities	_	_	1,787	4.28%	4,807	3.06%
Total	\$ 15,700	0.28%	\$ 8,462	2.69%	\$ 15,310	2.99%
Mortgage-backed securities:						
Residential mortgage-backed - US agency	\$ —	_	\$ 6,383	2.20%	\$ 3,144	1.76%
Collateralized mortgage obligations - US agency	6,666	1.82%	_	_	7,272	1.53%
Collateralized mortgage obligations - Private label	5,319	2.30%	1,503	3.97%		
Total	\$ 11,985	2.03%	\$ 7,886	2.54%	\$ 10,416	1.60%
Other non-maturity investments:						
Equity securities	\$ 206	0.41%	\$ —	_	\$ —	_
Total	\$ 206	0.41%	\$ —		\$ —	
Total investment securities	\$ 27,891	1.03%	\$ 16,348	2.62%	\$ 25,726	2.43%

	More Than Ten Years		Tota	Total Investment Securities		
(Dollars in thousands)	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Fair Value	Annualized Weighted Avg Yield	
Debt investment securities:						
US Treasury, agencies and GSEs	\$ —	_	\$ 21,584	\$ 21,562	0.71%	
State and political subdivisions	12,997	2.04%	13,167	13,141	1.25%	
Corporate	_	_	11,124	11,236	3.47%	
Asset backed securities	6,485	3.32%	13,079	12,801	3.55%	
Total	\$ 19,482	2.47%	\$ 58,954	\$ 58,740	1.98%	
Mortgage-backed securities:						
Residential mortgage-backed - US agency	\$ 5,318	2.60%	\$ 14,845	\$ 15,124	2.19%	
Collateralized mortgage obligations - US agency	11,305	1.95%	25,243	24,881	1.77%	
Collateralized mortgage obligations - Private label	10,494	3.13%	17,316	17,180	3.13%	
Total	\$ 27,117	2.54%	\$ 57,404	\$ 57,185	2.29%	
Other non-maturity investments:	· <u> </u>		·		·	
Equity securities	\$ —	_	\$ 206	\$ 206	0.53%	
Total	\$ —		\$ 206	\$ 206	0.53%	
Total investment securities	\$ 46,599	2.51%	\$116,564	\$116,131	2.13%	

Held-to-Maturity

	0. 17			han One		han Five
	One Yea	r or Less Annualized	to Five	Years Annualized	to Ter	Years Annualized
	Amortized	Weighted	Amortized	Weighted	Amortized	Weighted
(Dollars in thousands)	Cost	Avg Yield	Cost	Avg Yield	Cost	Avg Yield
Debt investment securities:						
US Treasury, agencies and GSEs	\$ 1,000	1,70%	\$ —		\$ —	_
State and political subdivisions	976	2.45%	3,554	3.12%	3,948	3.62%
Corporate			8,058	3.80%	14,230	4.41%
Asset backed securities	_	_	5,961	2.90%	2,213	4.03%
Total	\$ 1,976	2.07%	\$ 17,573	3.35%	\$ 20,391	4.22%
Mortgage-backed securities:						
Residential mortgage-backed - US agency	\$ 2,327	3.03%	\$ 3,243	3.06%	\$ 3,448	3.15%
Collateralized mortgage obligations - US agency	4,607	1.98%	2,944	3.15%	4,738	3.01%
Collateralized mortgage obligations - Private label	17,022	4.35%	_	_	5,025	3.33%
Total	\$ 23,956	3.76%	\$ 6,187	3,10%	\$ 13,211	3.17%
Total investment securities	\$ 25,932	3.64%	\$ 23,760	3.29%	\$ 33,602	3.81%

	More Than Ten Years		Tota	Total Investment Securit		
(Dollars in thousands)	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Fair Value	Annualized Weighted Avg Yield	
Debt investment securities:						
US Treasury, agencies and GSEs	\$ —	_	\$ 1,000	\$ 1,009	1.70%	
State and political subdivisions	2,198	1.95%	10,676	11,075	2.78%	
Corporate	2,488	4.37%	24.776	25,324	4.19%	
Asset backed securities	14,630	3.24%	22,804	22,078	3.39%	
Total	\$ 19,316	3.24%	\$ 59,256	\$ 59,486	3.59%	
Mortgage-backed securities:						
Residential mortgage-backed - US agency	\$ 2,891	2.96%	\$ 11,909	\$ 12,532	3.05%	
Collateralized mortgage obligations - US agency	11,424	2.43%	23,713	24,592	2.64%	
Collateralized mortgage obligations - Private label	24,373	2.83%	46,420	46,530	3.50%	
Total	\$ 38,688	2.72%	\$ 82,042	\$ 83,654	3.18%	
Total investment securities	\$ 58,004	2.89%	\$141,298	\$143,140	3.35%	

The following table sets forth our deposit composition in dollar amount and as a percentage of total deposits at June 30, 2020.

(In thousands)	June 30, 2020	Percent of deposits
Savings accounts	\$ 97,995	10.1%
Time accounts	303,441	31.3%
Time accounts of \$250,000 or more	106,899	11.0%
Money management accounts	17,341	1.8%
MMDA accounts	202,343	20.8%
Demand deposit interest-bearing	76,649	7.9%
Demand deposit noninterest-bearing	160,138	16.5%
Mortgage escrow funds	5,787	0.6%
Total Deposits	\$ 970,593	100.0%

At June 30, 2020, time deposit accounts in excess of \$100,000 totaled \$207.3 million, or 50.3% of time deposits and 21.4% of total deposits.

The following table indicates the amount of the Company's time deposit accounts of \$100,000 or more by time remaining until maturity as of June 30, 2020:

(In thousands)	
Remaining Maturity:	
Three months or less	\$ 49,290
Three through six months	57,707
Six through twelve months	81,264
Over twelve months	19,083
Total	\$ 207,344

The following table represents information regarding short-term borrowings for the six months ended June 30:

(Dollars in thousands)	2020	2019
Maximum outstanding at any month end	\$10,158	\$30,100
Average amount outstanding during the year	9,957	16,551
Balance at the end of the period	10,158	29,000
Average interest rate during the year	1.93%	2.72%
Average interest rate at the end of the period	1.89%	0.56%

At or For the Year Ended December 31, 2019 as compared to At or For the Year Ended December 31, 2018

Executive Summary and Results of Operations

The Company reported net income of \$4.3 million for 2019, an increase of \$245,000, or 6.1%, as compared to net income of \$4.0 million for 2018. Net income increased during 2019, as compared to the previous year, due to an increase in net interest income before the provision for loan losses of \$2.5 million and an increase in noninterest income of \$1.1 million. These increases were partially offset by an increase in noninterest expense of \$2.2 million, an increase in income tax expense of \$619,000, and an increase in the provision for loan losses of \$469,000. Basic and diluted earnings per share in 2019 were both \$0.80, as compared to \$0.97 and \$0.94 in 2018, respectively. Return on average assets decreased two basis points to 0.43% in 2019 from 0.45% in 2018. Return on average equity decreased 99 basis points to 5.34% in 2019 as compared to 6.33% in 2018. The decrease in

return on average assets in 2019, as compared to the previous year, was primarily due to average asset growth outpacing the increase in net income. Average assets increased in 2019 by \$107.6 million, or 12.0%, as the Company grew its total assets from \$933.1 million at December 31, 2018 to \$1.1 billion at December 31, 2019. The decrease in return on average equity in 2019, as compared to the previous year, was primarily due to the growth in equity outpacing the increase in net income due to the completion of the Private Placement.

Net interest income, before provision for loan losses, increased \$2.5 million, or 9.6%, to \$28.2 million in 2019 on average interest earning assets of \$948.0 million as compared to net interest income before provision for loan losses of \$25.8 million in 2018 on average interest earning assets of \$852.1 million. Interest and dividend income increased \$6.9 million in 2019 to \$41.8 million, as compared to interest and dividend income of \$34.8 million in 2018. The aggregate increase in the average balance of interest-earning assets of \$95.9 million was further enhanced by an increase of 31 basis points in the overall average yield earned on those assets that contributed an increase in interest and dividend income in 2019, as compared to the previous year. The \$6.9 million increase in interest income was partially offset by an increase in interest expense of \$4.5 million due to an increase in average interest-bearing liabilities of \$80.1 million and an increase in the average rate paid on those liabilities of 43 basis points in 2019 as compared to 2018.

The Company recorded a provision for loan losses of \$2.0 million in 2019 as compared to \$1.5 million in the prior year. The \$469,000 year-over-year increase in provision for loan losses reflected continued significant growth in the Bank's commercial and consumer lending portfolios, as well as changes to both quantitative and environmental factors deemed appropriate for the Bank's loan portfolio. Net loan balances increased 26.0% from December 31, 2018 to December 31, 2019. The Company recorded \$603,000 in net charge-offs in 2019 as compared to \$1.3 million in net charge-offs in 2018. The ratio of net charge-offs to average loans decreased to 0.09% in 2019 from 0.22% in 2018. The decrease in the year-over-year charge-off rate was due primarily to the charge-off in 2018 of a single fully-reserved commercial real estate loan in the amount of \$596,000 and the charge-off of a single fully-reserved commercial and industrial loan in the amount of \$124,000.

Noninterest income was \$4.9 million in 2019, an increase of \$1.1 million, or 28.2%, from \$3.8 million in 2018. Net gains on the sales and redemptions of investment securities increased \$511,000 from a loss of \$182,000 in 2018 to a gain of \$329,000 in 2019. During 2019, investment securities sales were part of the Company's portfolio optimization and liquidity management strategies. During 2018, the Company realized losses of \$182,000 on the sales of certain securities in order to provide funding for reinvestment into loans and securities considered to be better matches for the Company's overall balance sheet strategies. All other categories of noninterest income increased \$571,000 in aggregate during 2019, as compared to the previous year. The increase was primarily due to increases in service charges on deposits accounts, gains on marketable equity securities, debit card interchange fees, loan servicing fees, and earnings and gain on bank owned life of \$243,000, \$143,000, \$81,000, \$41,000, and \$35,000, respectively.

Noninterest expense increased \$2.2 million, or 9.3%, to \$25.7 million in 2019 from \$23.5 million in 2018. The year-over-year increase in noninterest expense was primarily due to personnel expenses that increased \$956,000, or 7.5%, in 2019 as compared to 2018. Noninterest expense further increased due to increases in building and occupancy costs, data processing costs, and foreclosed real estate expenses of \$431,000, \$415,000, and \$187,000, respectively. All other noninterest expenses increased \$192,000, or 2.9%, in 2019, as compared to the previous year. Substantially all categories of noninterest expense, not related to personnel costs, increased in a manner that was proportional to the Company's increases in total asset size and reflected the deployment of additional resources by the Company into risk management systems and improved customer service activities.

Total assets were \$1.1 billion at December 31, 2019 as compared to \$933.1 million at December 31, 2018. The increase in total assets of \$160.7 million, or 17.2%, was the result of the increase in loans, principally consumer and commercial loans, of \$161.2 million, partially offset by a \$6.2 million decrease in cash and cash equivalents. All other assets increased by a net \$5.7 million, primarily due to an increase in the operating lease right-of-use asset, premises and equipment, and investment securities of \$2.4 million, \$2.1 million and

\$1.5 million, respectively. The increase in total assets in 2019 was funded largely by a \$154.8 million increase in deposits, specifically a \$59.7 million increase in customer deposits, and a \$95.1 million increase in brokered deposits.

Measured as a percentage of total loans and total assets, the majority of loan asset quality metrics remained stable in comparison to recent reporting periods. The Company's consistent asset quality metrics are reflective of its disciplined risk management process, along with the relative economic stability of its Central New York State market area. Nonperforming loans to total loans were 0.67% at December 31, 2019, up 32 basis points compared to 0.35% at December 31, 2018. The allowance for loan losses to non-performing loans at December 31, 2019 was 165.25%, compared with 340.13% at December 31, 2018. Nonperforming loans to total loans increased from December 31, 2018 primarily due to the addition of one commercial real estate relationship that went into nonaccrual in the second quarter of 2019. Management believes that the value of the collateral properties underlying the loans are sufficient to preclude any significant losses related to these loans. Overall the allowance for loan losses to year end loans decreased from 1.18% at December 31, 2018 to 1.11% at December 31, 2019. This decrease reflected management's estimate of the probable losses inherent in the current loan portfolio.

The ratio of net charge-offs to average loans decreased to 0.09% for 2019 as compared to 0.22% for 2018. This activity reflected charge-offs for those accounts deemed uncollectible but reserved for in prior years through the provision for loan losses. Total past due loans measured as a percent of total loans, increased from 1.81% at December 31, 2018 to 2.09% at December 31, 2019, primarily due to an increase of \$4.2 million in past due commercial loans. The level of nonperforming loans increased in aggregate by \$3.1 million led by an increase of \$2.2 million in nonperforming commercial loans, a \$489,000 increase in nonperforming consumer loans, and a \$437,000 increase in nonperforming residential loans. Commensurate with the increase in nonperforming loans to year end loans, the ratio of nonperforming assets to total assets increased to 0.49% at December 31, 2019 from 0.36% at December 31, 2018.

The Company's shareholders' equity increased \$26.2 million, or 40.8%, to \$90.4 million at December 31, 2019 from \$64.2 million at December 31, 2018. This increase was primarily due to a \$20.2 million increase in additional paid in capital, a \$3.1 million decrease in other comprehensive loss, a \$2.7 million increase in retained earnings, and a \$179,000 increase in ESOP shares earnings. Additional paid in capital increased as a result of the proceeds received from the Private Placement of common and preferred shares that took place in May 2019. Comprehensive loss decreased primarily as the result of the appreciation in the fair market value of our available-for-sale investment securities during 2019. The increase in retained earnings resulted from \$4.3 million in net income recorded in 2019. Partially offsetting the increase in retained earnings was \$1.1 million in cash dividends declared on our common stock, \$208,000 in cash dividends declared on our preferred stock, and \$23,000 in cash dividends declared on our issued warrant. In addition, retained earnings was further reduced by a \$239,000 one-time adjustment, at January 1, 2019, related to the cumulative effect of the capitalization of the operating lease right-of-use-assets based on the adoption of ASU 2016-02—Leases (Topic 842).

Application of Critical Accounting Policies

The Company's consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States and follow practices within the banking industry. Application of these principles requires management to make estimates, assumptions and judgments that affect the amounts reported in the consolidated financial statements and accompanying notes. These estimates, assumptions and judgments are based on information available as of the date of the financial statements; accordingly, as this information changes, the financial statements could reflect different estimates, assumptions and judgments. Certain policies inherently have a greater reliance on the use of estimates, assumptions and judgments and as such have a greater possibility of producing results that could be materially different than originally reported. Estimates, assumptions and judgments are necessary when assets and liabilities are required to be recorded at fair value or when an asset or liability needs to be recorded contingent upon a future event. Carrying assets and liabilities at fair value

inherently results in more financial statement volatility. The fair values, and information used to record valuation adjustments for certain assets and liabilities, are based on quoted market prices or are provided by other third-party sources, when available. When third party information is not available, valuation adjustments are estimated in good faith by management.

The most significant accounting policies followed by the Company are presented in Note 1 to the consolidated financial statements. These policies, along with the disclosures presented in the other financial statement notes and in this discussion, provide information on how significant assets and liabilities are valued in the consolidated financial statements and how those values are determined. Based on the valuation techniques used and the sensitivity of financial statement amounts to the methods, assumptions, and estimates underlying those amounts, management has identified the allowance for loan losses, deferred income tax assets and liabilities, pension obligations, the evaluation of investment securities for other than temporary impairment, the annual evaluation of the Company's goodwill for possible impairment, and the estimation of fair values for accounting and disclosure purposes to be the accounting areas that require the most subjective and complex judgments. These areas could be the most subject to revision as new information becomes available.

Allowance for Loan Losses. The allowance for loan losses represents management's estimate of probable loan losses inherent in the loan portfolio. Determining the amount of the allowance for loan losses is considered a critical accounting estimate because it requires significant judgment on the use of estimates related to the amount and timing of expected future cash flows on impaired loans, estimated losses on pools of homogeneous loans based on historical loss experience, and environmental factors, all of which may be susceptible to significant change. The Company establishes a specific allowance for all commercial loans in excess of the total related credit threshold of \$100,000 and single borrower residential mortgage loans in excess of the total related credit threshold of \$300,000 identified as being impaired which are on nonaccrual and have been risk rated under the Company's risk rating system as substandard, doubtful, or loss. The Company also establishes a specific allowance, regardless of the size of the loan, for all loans subject to a troubled debt restructuring agreement. In addition, an accruing substandard loan could be identified as being impaired. The measurement of impaired loans is generally based upon the present value of future cash flows discounted at the historical effective interest rate, except that all collateral-dependent loans are measured for impairment based on the fair value of the collateral, less costs to sell. At December 31, 2019, the Bank's position in impaired loans consisted of 49 loans totaling \$7.5 million. Of these loans, 18 loans, totaling \$1.4 million, were valued using the present value of future cash flows method; and 31 loans, totaling \$6.1 million, were valued based on a collateral analysis. For all other loans, the Company uses the general allocation methodology that establishes an allowance to estimate the probable incurred loss for each risk-rating category.

Deferred Income Tax Assets and Liabilities. Deferred income tax assets and liabilities are determined using the liability method. Under this method, the net deferred tax asset or liability is recognized for the future tax consequences. This is attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases as well as net operating and capital loss carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income tax expense in the period that includes the enactment date. If current available evidence about the future raises doubt about the likelihood of a deferred tax asset being realized, a valuation allowance is established. The judgment about the level of future taxable income, including that which is considered capital, is inherently subjective and is reviewed on a continual basis as regulatory and business factors change. In the quarter ended March 31, 2019, the Company established, through a charge to earnings, a valuation allowance in the amount of \$136,000 in order to reserve against deferred tax assets related to New York State income taxes. Effective in January 2018, the Company adopted a modification methodology, made available following changes to the New York State tax code, effecting how the Company's state income tax liability is computed. Under this adopted methodology, it is unlikely that the Company will pay income taxes to New York State in future periods and it is therefore probable that the Company's deferred tax assets related to New York State income taxes are unlikely to further reduce the Company's state income tax rate

in the future. Accordingly, a valuation allowance against the value of those deferred tax assets was established to reduce the net deferred tax asset related to New York income taxes to \$-0-. At December 31, 2019, the Company had a valuation allowance of \$136,000 established against the future projected benefits of deferred tax assets related to New York State income tax obligations. There were no valuation allowances against deferred tax assets at December 31, 2018.

Pension Obligations. Pension and postretirement benefit plan liabilities and expenses are based upon actuarial assumptions of future events, including fair value of plan assets, interest rates, and the length of time the Company will have to provide those benefits.

Evaluation of Investment Securities for Other-Than-Temporary-Impairment ("OTTI"). The Company carries all of its available-for-sale investments at fair value with any unrealized gains or losses reported net of tax as an adjustment to shareholders' equity and included in accumulated other comprehensive income (loss), except for the credit-related portion of debt security impairment losses and OTTI of equity securities which are charged to earnings. The Company's ability to fully realize the value of its investments in various securities, including corporate debt securities, is dependent on the underlying creditworthiness of the issuing organization. In evaluating the debt security (both available-for-sale and held-to-maturity) portfolio for other-than-temporary impairment losses, management considers (1) if we intend to sell the security before recovery of its amortized cost; (2) if it is "more likely than not" we will be required to sell the security before recovery of its amortized cost basis; or (3) if the present value of expected cash flows is not sufficient to recover the entire amortized cost basis. When the fair value of a held-to-maturity or available-for-sale security is less than its amortized cost basis, an assessment is made as to whether OTTI is present. The Company considers numerous factors when determining whether a potential OTTI exists and the period over which the debt security is expected to recover. The principal factors considered are (1) the length of time and the extent to which the fair value has been less than the amortized cost basis, (2) the financial condition of the issuer and (guarantor, if any) and adverse conditions specifically related to the security, industry or geographic area, (3) failure of the issuer of the security to make scheduled interest or principal payments, (4) any changes to the rating of the security by a rating agency, and (5) the presence of credit enhancements, if any, including the guarantee of the federal government or any of its agencies.

Evaluation of Goodwill. Management performs an annual evaluation of the Company's goodwill for possible impairment. Based on the results of the 2019 evaluation, management has determined that the carrying value of goodwill is not impaired as of December 31, 2019.

Estimation of Fair Value. The estimation of fair value is significant to several of our assets; including investment securities available-for-sale, interest rate derivative, intangible assets, foreclosed real estate, and the value of loan collateral when valuing loans. These are all recorded at either fair value, or the lower of cost or fair value. Fair values are determined based on third party sources, when available. Furthermore, accounting principles generally accepted in the United States require disclosure of the fair value of financial instruments as a part of the notes to the consolidated financial statements. Fair values on our available-for-sale securities may be influenced by a number of factors; including market interest rates, prepayment speeds, discount rates, and the shape of yield curves.

Fair values for securities available-for-sale are obtained from an independent third party pricing service. Where available, fair values are based on quoted prices on a nationally recognized securities exchange. If quoted prices are not available, fair values are measured using quoted market prices for similar benchmark securities. Management made no adjustments to the fair value quotes that were provided by the pricing source. The fair values of foreclosed real estate and the underlying collateral value of impaired loans are typically determined based on evaluations by third parties, less estimated costs to sell. When necessary, appraisals are updated to reflect changes in market conditions.

Net Interest Income

Net interest income is the Company's primary source of operating income. It is the amount by which interest earned on interest-earning deposits, loans and investment securities exceeds the interest paid on deposits and borrowed money. Changes in net interest income and the net interest margin ratio resulted from the interaction between the volume and composition of interest earning assets, interest-bearing liabilities, and their respective yields and funding costs.

The following comments refer to the table of Average Balances and Rates and the Rate/Volume Analysis, both of which follow below.

Net interest income, before provision for loan losses, increased \$2.5 million, or 9.6%, to \$28.2 million in 2019 as compared to \$25.8 million in the previous year. Our net interest margin for the year ended December 31, 2019 decreased to 2.98% from 3.02% for the comparable prior year. The increase in net interest income was primarily due to a \$6.9 million, or 20.0%, increase in interest and dividend income in 2019 to \$41.8 million primarily as a result of the \$95.9 million, or 11.3%, increase in the average balances on interest earning assets (due primarily to loan growth) and the 31 basis point increase in the yield earned on those assets. This increase in interest income was partially offset by an increase in interest expense of \$4.5 million, or 49.6%, during 2019, as compared to the previous year. The increase in interest expense was primarily the result of an increase in the interest paid on time deposits of \$4.4 million, as a result of \$121.3 million increase in the average balance of, and a 61 basis point increase in the interest rate paid on time deposits. The increases in the average rates paid on time deposits reflected primarily the competitive environment for such deposits within the Company's marketplace as well as an increase in average short-term interest rates nationally during 2019.

Average Balances and Rates

The following table sets forth information concerning average interest-earning assets and interest-bearing liabilities and the yields and rates thereon. Interest income and resultant yield information in the table has not been adjusted for tax equivalency. Averages are computed on the daily average balance for each month in the period divided by the number of days in the period. Yields and amounts earned include loan fees. Nonaccrual loans have been included in interest-earning assets for purposes of these calculations.

	For the twelve months ended December 31,								
		2019			2018		,	2017	
(Dollars in thousands)	Average Balance	Interest	Average Yield / Cost	Average Balance	Interest	Average Yield / Cost	Average Balance	Interest	Average Yield / Cost
Interest-earning assets:									
Loans	\$ 691,712	\$34,035	4.92%	\$609,648	\$28,426	4.66%	\$546,193	\$24,392	4.47%
Taxable investment securities	231,656	7,241	3.13%	197,477	5,418	2.74%	184,170	3,827	2.08%
Tax-exempt investment securities	7,679	178	2.32%	28,444	720	2.53%	28,497	1,038	3.64%
Fed funds sold and interest-earning deposits	16,939	304	1.79%	16,496	246	1.49%	20,999	156	0.74%
Total interest-earning assets	947,986	41,758	4.40%	852,065	34,810	4.09%	779,859	29,413	3.77%
Noninterest-earning assets:									
Other assets	66,705			57,529			50,147		
Allowance for loan losses	(7,782)			(7,531)			(6,381)		
Net unrealized losses on available-for-sale securities	(1,215)			(4,018)			(1,642)		
Total assets	\$1,005,694			\$898,045			\$821,983		
Interest-bearing liabilities:									
NOW accounts	\$ 66,945	\$ 120	0.18%	\$ 66,934	\$ 116	0.17%	\$ 67,581	\$ 105	0.16%
Money management accounts	13,711	21	0.15%	13,584	21	0.15%	13,960	25	0.18%
MMDA accounts	189,373	1,772	0.94%	236,958	2,262	0.95%	231,671	1,384	0.60%
Savings and club accounts	83,798	98	0.12%	83,511	85	0.10%	84,092	82	0.10%
Time deposits	364,636	8,702	2.39%	243,342	4,328	1.78%	189,614	2,308	1.22%
Subordinated loans	15,108	863	5.71%	15,075	846	5.61%	15,041	794	5.28%
Borrowings	77,795	1,952	2.51%	71,875	1,386	1.93%	70,071	1,592	2.27%
Total interest-bearing liabilities	811,366	13,528	1.67%	731,279	9,044	1.24%	672,030	6,290	0.94%
Noninterest-bearing liabilities:									
Demand deposits	103,727			96,719			83,053		
Other liabilities	10,465			6,380			5,517		
Total liabilities	925,558			834,378			760,600		
Shareholders' equity	80,136			63,667			61,383		
Total liabilities & shareholders' equity	\$1,005,694			\$898,045			\$821,983		
Net interest income		\$28,230			\$25,766			\$23,123	
Net interest rate spread			2.73%			2.85%			2.83%
Net interest margin			2.98%			3.02%			2.97%
Ratio of average interest-earning assets to average interest- bearing liabilities			116.84%			116.52%			116.05%

Rate/Volume Analysis

Net interest income can also be analyzed in terms of the impact of changing interest rates on interest-earning assets and interest-bearing liabilities, and changes in the volume or amount of these assets and liabilities. The following table represents the extent to which changes in interest rates and changes in the volume of interest-earning assets and interest-bearing liabilities have affected the Company's interest income and interest expense during the years indicated. Information is provided in each category with respect to: (i) changes attributable to changes in volume (change in volume multiplied by prior rate); (ii) changes attributable to changes in rate (changes in rate multiplied by prior volume); and (iii) total increase or decrease. Changes attributable to both rate and volume have been allocated ratably. Tax-exempt securities have not been adjusted for tax equivalency.

	Years Ended December 31,						
		9 vs. 2018 Inc Decrease) Due		2018 vs. 2017 Increase/ (Decrease) Due to			
		Decrease) Due	Total		Decrease) Due	Total	
			Increase			Increase	
(In thousands)	Volume	Rate	(Decrease)	Volume	Rate	(Decrease)	
Interest Income:							
Loans	\$3,976	\$1,633	\$ 5,609	\$2,924	\$1,110	\$ 4,034	
Taxable investment securities	1,010	813	1,823	293	1,298	1,591	
Tax-exempt investment securities	(486)	(56)	(542)	(2)	(316)	(318)	
Interest-earning deposits	7	51	58	(39)	129	90	
Total interest and dividend income	4,507	2,441	6,948	3,176	2,221	5,397	
Interest Expense:							
NOW accounts	_	4	4	(1)	12	11	
Money management accounts	_	_	_	(1)	(3)	(4)	
MMDA accounts	(446)	(44)	(490)	32	846	878	
Savings and club accounts	_	13	13	(1)	4	3	
Time deposits	2,595	1,779	4,374	769	1,251	2,020	
Subordinated loans	2	15	17	2	50	52	
Borrowings	122	444	566	40	(246)	(206)	
Total interest expense	2,273	2,211	4,484	840	1,914	2,754	
Net change in net interest income	\$2,234	\$ 230	\$ 2,464	\$2,336	\$ 307	\$ 2,643	

Interest Income

Changes in interest income result from changes in the average balances of loans, securities, and interest-earning deposits and the related average yields on those balances.

Interest and dividend income increased \$6.9 million, or 20.0%, to \$41.8 million in 2019 as compared to \$34.8 million in 2018 due principally to the \$95.9 million, or 11.3%, increase in average interest-earning assets. The increase in average interest-earning assets was primarily due to the increase in the average balance of loans, which increased \$82.1 million, or 13.5%, in 2019, as compared to the previous year. The increase in the average balance of loans was due principally to an increase in consumer loans, commercial loans, and residential mortgage loans. The increase in consumer loans was primarily the result of the 2019 acquisition of \$41.9 million in unsecured consumer loans and \$45.3 million in loans secured by residential real estate and automobiles. Commercial lending growth was primarily a reflection of organic origination activity along with the acquisition of a \$6.8 million pool of loans of commercial and industrial loans. The increase in residential mortgage loans was primarily a reflection of organic origination activity along with the acquisition of a \$2.0 million pool of first lien residential mortgages. The average yield earned on loans increased 26 basis points to 4.92% in 2019 from 4.66% in 2018 as maturing lower rate loans were replaced by loans at current higher market rates. Interest on taxable investment securities increased \$1.8 million in 2019, as compared with the

previous year. The average yields earned on taxable investment securities increased 39 basis points to 3.13% in 2019 as compared to 2.74% in 2018, accounting for an increase in interest income of \$813,000 in 2019, as compared to 2018. The year-over-year increase in the interest rates earned on taxable investment securities was primarily due to increases in shorter-term interest rates that allowed amortizing and maturing securities' balances to be replaced in 2019 with generally higher-yielding securities. The average balance of taxable investment securities increased \$34.2 million, or 17.3%, in 2019, as compared to the previous year, accounting for an increase in 2019 interest income from taxable investment securities of \$1.0 million as compared to 2018.

Interest Expense

Changes in interest expense result from changes in the average balances of deposits and borrowings and the related average interest costs on those balances.

Interest expense increased \$4.5 million, or 49.6%, to \$13.5 million in 2019, as compared to \$9.0 million in the previous year. The increase in interest expense was primarily the result of an increase in interest paid on time deposits of \$4.4 million. Increases between 2019 and 2018 were recorded in average rates paid on time deposits of 61 basis points. The increases in the average rates paid on time deposits reflected the competitive environment for such deposits within the Company's.

Total interest expense also increased in 2019, as compared to the previous year, due to increases in the average balance of time deposits of \$121.3 million. The increase in the average balance of time deposits in 2019 was due to a \$91.2 million increase in time deposits obtained by the Bank through its customer base and an increase of \$30.1 million in acquired brokered time deposits. The increase in the average balance of time deposits was largely the result of targeted promotional activity for our time deposit products. Further contributing to the increase in interest expense was a \$566,000 increase in borrowings expense, which increased due to a \$5.9 million increase in the average balance of borrowings.

Provision for Loan Losses

We establish a provision for loan losses, which is charged to operations, at a level management believes is appropriate to absorb probable incurred credit losses in the loan portfolio. In evaluating the level of the allowance for loan losses, management considers historical loss experience, the types and amount of loans in the loan portfolio, adverse situations that may affect a borrower's ability to repay, estimated value of any underlying collateral, and prevailing economic conditions. This evaluation is inherently subjective as it requires estimates that are susceptible to significant revision as more information becomes available or as future events change. The provision for loan losses represents management's estimate of the amount necessary to maintain the allowance for loan losses at an adequate level.

The Company recorded a provision for loan losses of \$2.0 million in 2019 as compared to \$1.5 million in the prior year. The \$469,000 year-overyear increase in provision for loan losses reflected continued significant growth in the Bank's lending portfolios, as well as changes to both quantitative and environmental factors deemed appropriate for the Bank's loan portfolio. The Company recorded \$603,000 in net charge-offs in 2019 as compared to \$1.3 million in net charge-offs in 2018. The ratio of net charge-offs to average loans decreased to 0.09% in 2019 from 0.22% in 2018. The decrease in the year-over-year charge-off rate was due primarily to the charge-off in 2018 of a single fully-reserved commercial real estate loan in the amount of \$596,000 and the charge-off of a single fully-reserved commercial and industrial loan in the amount of \$124,000.

Loans purchased outside of the Bank's general market area are subject to substantial prepurchase due diligence. Homogenous pools of purchased loans are subject to prepurchase analyses led by a team of the Bank's senior executives and credit analysts. In each case, the Bank's analytical processes consider the types of loans being evaluated, the underwriting criteria employed by the originating entity, the historical performance of such loans, especially in the most recent deeply recessionary period, the collateral enhancements and other credit loss

mitigation factors offered by the seller and the capabilities and financial stability of the servicing entities involved. From a credit risk perspective, these loan pools also benefit from broad diversification, including wide geographic dispersion, the readily-verifiable historical performance of similar loans issued by the originators, as well as the overall experience and skill of the underwriters and servicing entities involved as counterparties to the Bank in these transactions. The performance of all purchased loan pools are monitored regularly from detailed reports and remittance reconciliations provided at least monthly by the servicing entities.

Over the life of the loan pools, the credit performance of the purchased loan pools are analyzed against prepurchase and updated expectations at least monthly. The expected credit loss experience for purchased pools of loans is modified, to the extent deemed necessary, on a prospective basis during the life of the purchased loan pools. The Bank does not initially increase the allowance for loan losses on the purchase date of the loan pools.

Noninterest Income

The Company's noninterest income is primarily comprised of fees on deposit account balances and transactions, loan servicing, commissions and net gains or losses on sales of securities, loans, and foreclosed real estate.

The following table sets forth certain information on noninterest income for the years indicated.

		Years Ended December 31,				
(Dollars in thousands)	2019	2018	Chai	nge		
Service charges on deposit accounts	\$1,391	\$1,148	\$ 243	21.2%		
Earnings and gain on bank owned life insurance	462	427	35	8.2%		
Loan servicing fees	211	170	41	24.1%		
Debit card interchange fees	657	576	81	14.1%		
Insurance agency revenue	844	840	4	0.5%		
Other charges, commissions and fees	878	868	10	1.2%		
Noninterest income before gains	4,443	4,029	414	10.3%		
Net gains (losses) on sales and redemptions of investment securities	329	(182)	511	280.8%		
Net gains on sales of loans and foreclosed real estate	64	50	14	28.0%		
Gains (losses) on marketable equity securities	81	(62)	143	100.0%		
Total noninterest income	\$4,917	\$3,835	\$1,082	28.2%		

Noninterest income for the year ended December 31, 2019 increased \$1.1 million, or 28.2%, to \$4.9 million from the year ended December 31, 2018. Noninterest income before gains (losses) on the sales and redemptions of investment securities, gains (losses) on marketable equity securities, and gains on the sale of loans and foreclosed real estate increased \$414,000, or 10.3%, to \$4.4 million in 2019 as compared to \$4.0 million in 2018. This \$414,000 increase in 2019, as compared with the previous year, was primarily due to increases in service charges on deposits accounts, debit card interchange fees, loan servicing fees, and earnings and gain on bank owned life insurance of \$243,000, \$81,000, \$41,000, and \$35,000, respectively.

Net gains (losses) on the sales and redemptions of investment securities increased \$511,000 from a loss of \$182,000 in 2018 to a gain of \$329,000 in 2019. During 2019, investment securities sales were part of the Company's portfolio optimization and liquidity management strategies. During 2018, the Company realized losses of \$182,000 on the sales of certain securities in order to provide funding for reinvestment into loans and securities considered to be better matches for the Company's overall balance sheet strategies.

Noninterest Expense

The following table sets forth certain information on noninterest expense for the years indicated.

	Years Ended December 31,				
(Dollars in thousands)	2019	2018	Chan	ige	
Salaries and employee benefits	\$13,660	\$12,704	\$ 956	7.5%	
Building occupancy	2,674	2,243	431	19.2%	
Data processing	2,339	1,924	415	21.6%	
Professional and other services	1,325	1,360	(35)	-2.6%	
Advertising	962	920	42	4.6%	
FDIC assessments	421	492	(71)	-14.4%	
Audits and exams	427	422	5	1.2%	
Insurance agency expense	816	875	(59)	-6.7%	
Community service activities	620	541	79	14.6%	
Foreclosed real estate expenses	337	150	187	124.7%	
Other expenses	2,149	1,918	231	12.0%	
Total noninterest expenses	\$25,730	\$23,549	\$2,181	9.3%	

Noninterest expenses for 2019 increased \$2.2 million, or 9.3%, to \$25.7 million from \$23.5 million for the prior year. Higher noninterest expenses largely reflect investments in personnel and support functionality related to the Company's continued efforts to increase its business activities, primarily in the Syracuse market. In addition, these higher expenses reflect management's execution of its planned enhancements to the Company's risk management capabilities and improvements to the Company's customer service level functionality.

The year-over-year increase in noninterest expenses was primarily due to higher personnel expenses that increased \$956,000, or 7.5%, in 2019 as compared to 2018. The increase in salaries expense was due to the expansion of the Company's staffing levels in a number of areas, primarily focused on enhanced business development, risk management activities and customer service-related activities. These increases in personnel expenses resulted from increases of \$473,000, or 5.7%, in salaries expense, a \$401,000, or 18.3%, in aggregate employee benefits and payroll taxes, and a \$121,000 increase in commission expense, partially offset by a decrease of \$39,000, or 2.6%, in all other personnel expense categories. Salaries expense increased primarily as the result of additional staff members supporting current and planned asset growth and risk management activities as well as increased customer service and other operating costs reflecting the ramp-up period for our two new banking locations in Oneida and Onondaga counties. The year-over-year increases in employee benefit expenses were consistent with the salary increases discussed above.

Building and occupancy expense increased \$431,000, or 19.2%, primarily due to increased maintenance, depreciation and communications expenses principally related to the Company's ongoing refurbishment and modernization programs for its physical facilities and the opening of the Bank's tenth full-service branch location, located in Clay NY, in November 2018. These increases are consistent with branch and operational growth.

Data processing expense increased \$415,000, or 21.6%, primarily due to increased equipment depreciation related to system upgrades and increased transaction-related fees paid to third-party vendors. These increased transaction-related fees resulted from higher transaction volumes derived from both greater numbers of customers in 2019, as compared to the previous year, and increased utilization levels by existing customers of the Bank's internet and mobile banking offerings.

Community service activities increased \$79,000, or 14.6%, in 2019 primarily due to the Company's expanded presence in the Syracuse market. These activities, include event sponsorships, financial support for community development agencies, memberships and other direct support for economic development agencies

and similar organizations dedicated to growing the economies, and increasing employment, within our marketplace, and charitable donations. These activities are intended to support overall economic and social development within the communities in which we serve and to promote overall brand awareness.

Foreclosed real estate expenses increased \$187,000 as a result of property taxes paid on a foreclosed property. This foreclosed property was sold in February 2019 and is no longer in foreclosed real estate at December 31, 2019.

Other expenses increased \$231,000, or 12.0%, principally due to \$148,000 in expenses related to either the impairment or disposals of certain fixed assets. During 2019, the Company recognized an impairment charge of \$75,000 related to the pending sale of a vacant parcel of land the Company was no longer considering for development as a potential branch site and \$73,000 related to the disposal of certain fixed assets at a branch that was commensurate with significant renovations and modernization completed at that branch during the year. The sale of the vacant land was completed in the first quarter of 2020 with net proceeds being substantially equal to the property's adjusted historical cost at December 31, 2019.

Income Tax Expense

The Company reported income tax expense of \$1.2 million in 2019 and \$546,000 in 2018. Income tax expense increased \$619,000 in 2019 as compared to the previous year. In 2019, the Company's effective tax rate was 21.4%, as compared to 11.9% in 2018. The Company's effective tax rate increased by 2.5%, in order to establish a reserve against deferred tax assets related to New York State income taxes. The Company's effective tax rate was reduced from the federal statutory income tax rate of 21.0% by 2.6% in 2019 by the combined effects of tax exempt income received in the form of interest on tax exempt loans and investment securities, and the increase in the value of its bank owned life insurance. All other individually immaterial items related to the calculation of the Company's effective tax rate in aggregate increased the Company's effective tax rate by 0.5% in 2019.

Banking corporations operating in New York State are taxed under the New York State General Business Corporation Franchise Tax provisions. New York State franchise tax is imposed in an amount equal to the greater of (1) 6.5% of Business Income, (2) .05% of average Business Capital, or (3) a fixed dollar amount based on New York sourced gross receipts. However, various modifications are available to community banks (defined as banks with less than \$8 billion in total assets) regarding certain deductions associated with interest income. Commencing January 1, 2018, the Company changed its subtraction modification from that of a captive real estate investment trust (REIT) to one based on interest income from qualifying loans. This change follows changes to the laws enacted by New York State effective January 1, 2015. As a result, for 2019 the Company is subject to a fixed dollar amount of New York State income tax and the current effective income tax payable to New York State was reduced to close to \$0. It is anticipated that the Company's New York State effective income tax rate will remain substantially at 0.0% for future periods under the current law. In the first quarter of 2019, the Company established, through a charge to earnings, a valuation allowance in the amount of \$136,000, increasing the Company's effective tax rate by 2.5% in 2019, in order to establish a reserve against deferred tax assets related to New York State income taxes to New York in future periods and it is therefore probable that the Company's existing deferred tax assets related to New York State income taxes are unlikely to further reduce the Company's State tax rate in the future. Accordingly, the \$136,000 valuation allowance was established against the recorded value of those deferred tax assets in order to reduce the net deferred tax asset related to New York income taxes to \$-0- at December 31, 2019. There were no valuation allowances against deferred tax assets at December 31, 2018.

As a Maryland business corporation, the Company is required to file an annual report with, and pay franchise taxes to, the State of Maryland.

Earnings Per Share

Basic and diluted earnings per share for the year ended December 31, 2019 were both \$0.80, as compared to basic and diluted earnings per share of \$0.97 and \$0.94 for the year ended December 31, 2018. The decrease in earnings per share between these two periods was due to the decrease in net income available to common shareholders between these two time periods.

Changes in Financial Condition

Total assets were \$1.1 billion at December 31, 2019 as compared to \$933.1 million at December 31, 2018. The increase in total assets of \$160.7 million, or 17.2%, was the result of the increase in loans, principally consumer and commercial loans, of \$161.2 million, partially offset by a \$6.2 million decrease in cash and cash equivalents. All other assets increased by a net \$5.7 million, primarily due to an increase in the operating lease right-of-use asset, premises and equipment, and investment securities of \$2.4 million, \$2.1 million and \$1.5 million, respectively. The increase in total assets in 2019 was funded largely by a \$154.8 million increase in deposits, specifically a \$59.7 million increase in customer deposits, and a \$95.1 million increase in brokered deposits.

Investment Securities

The investment portfolio represented 25.2% of the Company's average interest earning assets in 2019 and is designed to generate a favorable rate of return in consideration of all risk factors associated with debt securities while assisting the Company in meeting its liquidity needs and interest rate risk strategies. All of the Company's investments, with the exception of marketable equity securities, are classified as either available-for-sale or held-to-maturity. The Company does not hold any trading securities. The Company invests primarily in securities issued by United States Government agencies and sponsored enterprises ("GSE"), mortgage-backed securities, collateralized mortgage obligations, state and municipal obligations, mutual funds, equity securities, investment grade corporate debt instruments, and common stock issued by the FHLBNY. By investing in these types of assets, the Company reduces the credit risk of its asset base through geographical and collateral-type diversification but must accept lower yields than would typically be available on loan products. Our mortgage-backed securities and collateralized mortgage obligations portfolios include privately-issued but substantially over-collateralized pass-through securities as well as pass-through securities guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae. At December 31, 2019, the investment securities portfolio had approximately 3.8% of its composition in various forms of pass-through securities comprised of seasoned mortgage-backed securities whose underlying collateral was, to varying degrees (depending on the individual security's initial and current composition), considered sub-prime or high-risk at the securities' issuance dates. These privately-issued mortgage-backed securities are believed to be adequately collateralized by subordinate structures and ongoing credit support mechanisms and are, therefore, well insulated from loss of principal due to credit default.

At December 31, 2019, available-for-sale investment securities decreased 37.4% to \$111.1 million and held-to-maturity investment securities increased 128.1% to \$123.0 million. There were no securities that exceeded 10% of consolidated shareholders' equity.

Our available-for-sale investment securities are carried at fair value and our held-to-maturity investment securities are carried at amortized cost.

The following table sets forth the carrying value of the Company's investment portfolio at December 31:

		Available-for-Sal	le	H	eld-to-Maturit	У
(In thousands)	2019	2018	2017	2019	2018	2017
Investment Securities:						
US treasury, agencies and GSEs	\$ 16,820	\$ 17,031	\$ 41,336	\$ 1,998	\$ 3,987	\$ 4,948
State and political subdivisions	1,736	23,065	13,681	8,534	5,089	35,130
Corporate	12,554	17,200	8,600	25,779	9,924	8,311
Asset backed securities	13,232	18,119	6,644	23,099	1,509	_
Residential mortgage-backed—US agency	18,980	31,666	35,742	13,715	11,601	6,853
Collateralized mortgage obligations—US agency	30,785	46,441	53,348	19,607	13,972	7,574
Collateralized mortgage obligations—Private label	16,821	23,936	11,052	30,256	7,826	3,380
Common stock—financial services industry	206	206	735	_	_	_
Total investment securities	\$111,134	\$ 177,664	\$ 171,138	\$ 122,988	\$ 53,908	\$ 66,196

The following table sets forth the scheduled maturities, amortized cost, fair values and average yields for the Company's investment securities at December 31, 2019. Average yield is calculated on the amortized cost to maturity. Adjustable rate mortgage-backed securities are included in the period in which interest rates are next scheduled to be reset.

AVAILABLE FOR SALE

	One Yea	r or Less		han One e Years		han Five Years
(Dollars in thousands)	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Annualized Weighted Avg Yield
Debt investment securities:	<u> </u>					
US Treasury, agencies and GSEs	\$ 9,976	1.54%	\$ —		\$ 6,874	2.76%
State and political subdivisions	245	1.73%	_	_	_	_
Corporate	31	3.94%	10,406	3.77%	1,910	3.96%
Asset backed securities	_	_	1,046	4.11%	7,025	3.85%
Total	\$ 10,252	1.55%	\$ 11,452	3.80%	\$ 15,809	3.39%
Mortgage-backed securities:						
Residential mortgage-backed—US agency	\$ —	_	\$ 2,201	2.61%	\$ 4,656	2.07%
Collateralized mortgage obligations—US agency	_	_	889	1.92%	7,372	2.27%
Collateralized mortgage obligations—Private label	2,002	3.94%	1,924	3.99%		
Total	\$ 2,002	3.94%	\$ 5,014	3.02%	\$ 12,028	2.19%
Other non-maturity investments:	·			·		
Equity securities	\$ 206	0.53%	\$ —		\$ —	
Total	\$ 206	0.53%	\$ —		\$ —	
Total investment securities	\$ 12,460	1.92%	\$ 16,466	3.56%	\$ 27,837	2.87%

	More Than Ter	ı Years	Total Investment Securities				
(Dollars in thousands)	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Fair Value	Annualized Weighted Avg Yield		
Debt investment securities:							
US Treasury, agencies and GSEs	\$ —	_	\$ 16,850	\$ 16,820	2.03%		
State and political subdivisions	1,490	3.29%	1,735	1,736	3.07%		
Corporate	_	_	12,347	12,554	3.80%		
Asset backed securities	5,119	3.88%	13,190	13,232	3.88%		
Total	\$ 6,609	3.75%	\$ 44,122	\$ 44,342	3.12%		
Mortgage-backed securities:							
Residential mortgage-backed—US agency	\$ 12,155	2.54%	\$ 19,012	\$ 18,980	2.43%		
Collateralized mortgage obligations—US agency	23,059	2.34%	31,320	30,785	2.31%		
Collateralized mortgage obligations—Private label	12,841	3.26%	16,767	16,821	3.42%		
Total	\$ 48,055	2.64%	\$ 67,099	\$ 66,586	2.62%		
Other non-maturity investments:							
Equity securities	\$ —	_	\$ 206	\$ 206	0.53%		
Total	\$ —		\$ 206	\$ 206	0.53%		
Total investment securities	\$ 54,664	2.77%	\$111,427	\$111,134	2.82%		

HELD-TO-MATURITY

	One Yea	ır or Less		han One e Years	More Than Five to Ten Years	
(Dollars in thousands)	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Annualized Weighted Avg Yield
Debt investment securities:		Tive Ticia		Try Tied		Tivg Ticiu
US Treasury, agencies and GSEs	\$ 998	2.08%	\$ 1,000	1.70%	\$ —	_
State and political subdivisions	310	2.08%	4,227	3.20%	3,331	2.91%
Corporate		_	9,575	3.60%	14,208	4.18%
Asset backed securities			9,872	4.09%		
Total	\$ 1,308	2.08%	\$ 24,674	3.65%	\$ 17,539	3.94%
Mortgage-backed securities:						
Residential mortgage-backed—US agency	\$ 504	3.11%	\$ 1,648	3.74%	\$ 1,468	3.52%
Collateralized mortgage obligations—US agency	_	_	5,996	3.01%	4,750	2.78%
Collateralized mortgage obligations—Private label	1,808	4.09%	2,761	3.88%	5,183	3.96%
Total	\$ 2,312	3.88%	\$ 10,405	3.36%	\$ 11,401	3.41%
Total investment securities	\$ 3,620	3.23%	\$ 35,079	3.56%	\$ 28,940	3.73%

	More Than	n Ten Years	Tota	Total Investment Securities			
(Dollars in thousands)	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Fair Value	Annualized Weighted Avg Yield		
Debt investment securities:							
US Treasury, agencies and GSEs	\$ —	_	\$ 1,998	\$ 2,000	1.89%		
State and political subdivisions	665	4.97%	8,534	8,654	3.19%		
Corporate	1,996	3.74%	25,779	26,334	3.93%		
Asset backed securities	13,227	3.62%	23,099	23,085	3.82%		
Total	\$ 15,888	3.69%	\$ 59,410	\$ 60,073	3.71%		
Mortgage-backed securities:							
Residential mortgage-backed—US agency	\$ 10,095	3.02%	\$ 13,715	\$ 13,959	3.17%		
Collateralized mortgage obligations—US agency	8,861	3.36%	19,607	19,878	3.11%		
Collateralized mortgage obligations—Private label	20,504	2.50%	30,256	30,238	2.97%		
Total	\$ 39,460	2.83%	\$ 63,578	\$ 64,075	3.06%		
Total investment securities	\$ 55,348	3.07%	\$122,988	\$124,148	3.37%		

The yield information disclosed above does not give effect to changes in fair value that are reflected in accumulated other comprehensive loss in consolidated shareholders' equity.

Loans Receivable

Average loans receivable represented 73.0% of the Company's average interest earning assets in 2019 and account for the greatest portion of total interest income. At December 31, 2019, the Company has the largest portion of its loan portfolio in commercial loan products that represented 51.6% of total loans. These products include credits extended to businesses and political subdivisions within its marketplace that are typically secured by commercial real estate, equipment, inventories, and accounts receivable. The residential mortgage loans product segment represents 31.9% of total loans at December 31, 2019. The Company has seen the proportion of commercial loan products to total loans increase in recent years and it will continue to emphasize these types of loans. Notwithstanding this emphasis, the Company also anticipates a continued commitment to financing the purchase or improvement of residential real estate in its market area.

The following table sets forth the composition of our loan portfolio, including net deferred costs, in dollar amount and as a percentage of loans.

	December 31,									
(Dollars in thousands)	2019)	2018		2017	,	2016	j	2015	
Residential real estate	\$212,663	27.2%	\$238,894	38.5%	\$221,623	38.2%	\$206,900	42.0%	\$189,367	44.0%
Residential real estate held-for-sale	35,936	4.6%		0.0%	_	0.0%	_	0.0%		0.0%
Commercial real estate	254,781	32.6%	212,622	34.3%	192,540	33.2%	150,569	30.6%	129,481	30.1%
Commercial and tax exempt	148,776	19.0%	116,914	18.8%	111,786	19.2%	103,394	21.0%	83,016	19.3%
Home equity and junior liens	46,688	6.0%	26,416	4.3%	26,235	4.5%	24,991	5.1%	23,688	5.5%
Consumer loans	82,607	10.6%	25,424	4.1%	28,647	4.9%	6,293	1.3%	4,886	1.1%
Total loans receivable	\$781,451	100.0%	\$620,270	100.0%	\$580,831	100.0%	\$492,147	100.0%	\$430,438	100.0%

The following table shows the amount of loans outstanding, including net deferred costs, as of December 31, 2019 which, based on remaining scheduled repayments of principal, are due in the periods indicated. Demand loans having no stated schedule of repayments, no stated maturity, and overdrafts are reported as one year or less. Adjustable and floating rate loans are included in the period on which interest rates are next scheduled to adjust, rather than the period in which they contractually mature. Fixed rate loans are included in the period in which the final contractual repayment is due.

(In thousands)	Due Under One Year	Due 1-5 Years	Due Over Five Years	Total
Real estate:				
Commercial real estate	\$ 73,453	\$ 167,101	\$ 14,227	\$ 254,781
Residential real estate	9,663	15,974	222,962	248,599
Total real estate loans	83,116	183,075	237,189	503,380
Commercial and tax exempt	95,934	41,107	11,735	148,776
Home Equity and junior liens	57	4,162	42,469	46,688
Consumer	1,972	55,239	25,396	82,607
Total loans	\$ 181,079	\$ 283,583	\$ 316,789	\$ 781,451

The following table sets forth fixed- and adjustable-rate loans at December 31, 2019 that are contractually due after December 31, 2020:

(In thousands)	Due After One Year
Interest rates:	
Fixed	\$ 366,640
Variable	_233,732
Total loans	\$600,372

Total loans receivable, including net deferred costs, increased \$161.2 million, or 26.0%, to \$781.5 million at December 31, 2019 when compared to \$620.3 million at December 31, 2018, primarily due to growth in consumer and commercial loans. The Company does not originate sub-prime, Alt-A, negative amortizing or other

higher risk structured residential mortgages. Consumer and home equity and junior lien loans increased \$77.5 million, or 149.4%, to \$129.3 million at December 31, 2019 as compared to \$51.8 million at December 31, 2018. Commercial and commercial real estate loans increased \$74.0 million, or 22.5%, to \$403.6 million at December 31, 2019 as compared to \$329.5 million at December 31, 2018. The Company maintained its previously established credit standards, but continued to benefit from the expanding relationship-derived business activity within the markets that the Bank serves.

Nonperforming Loans and Assets

The following table represents information concerning the aggregate amount of nonperforming assets:

			December 31,		
(Dollars In thousands)	2019	2018	2017	2016	2015
Nonaccrual loans:					
Commercial and commercial real estate loans	\$3,002	\$ 830	\$2,443	\$1,863	\$3,238
Consumer	631	142	363	388	365
Residential mortgage loans	1,613	1,176	2,088	2,560	1,715
Total nonaccrual loans	5,246	2,148	4,894	4,811	5,318
Total nonperforming loans	5,246	2,148	4,894	4,811	5,318
Foreclosed real estate	88	1,173	468	597	517
Total nonperforming assets	\$5,334	\$3,321	\$5,362	\$5,408	\$5,835
Accruing troubled debt restructurings	\$2,008	\$2,574	\$2,539	\$5,531	\$1,916
Nonperforming loans to total loans	0.67%	0.35%	0.84%	0.98%	1.24%
Nonperforming assets to total assets	0.49%	0.36%	0.61%	0.72%	0.94%

Nonperforming assets include nonaccrual loans, nonaccrual troubled debt restructurings ("TDR"), and foreclosed real estate ("FRE"). Loans are considered a TDR when, due to a borrower's financial difficulties, the Company makes a concession(s) to the borrower that it would not otherwise consider. These modifications may include an extension of the term of the loan, and granting a period when interest-only payments can be made, with the principal payments made over the remaining term of the loan or at maturity. TDRs are included in the above table within the categories of nonaccrual loans or accruing TDRs.

Total nonperforming loans increased \$3.1 million, or 144.2%, between December 31, 2018 and December 31, 2019, driven by increases of \$2.2 million, \$489,000 and \$437,000 in nonperforming commercial and commercial real estate loans, consumer loans, and residential real estate loans, respectively. The increase in nonperforming commercial and commercial real estate loans was comprised of 20 loans that were nonperforming at December 31, 2019 as compared to 11 loans that were nonperforming at December 31, 2018. The increase in nonperforming residential real estate loans was comprised of 16 loans that were nonperforming at December 31, 2018. The increase in nonperforming residential real estate loans was comprised of 16 loans that were nonperforming at December 31, 2018 as compared to 11 loans that were nonperforming at December 31, 2018. Management believes that the value of the collateral properties underlying the loans is sufficient to preclude any significant losses related to these loans. Management continues to monitor and react to national and local economic trends as well as general portfolio conditions which may impact the quality of the portfolio, and considers these environmental factors in support of the allowance for loan loss reserve. Management believes that the current level of the allowance for loan losses, at \$8.7 million at December 31, 2019, adequately addresses the current level of risk within the loan portfolio, particularly considering the types and levels of collateralization supporting the substantial majority of the portfolio. The Company maintains strict loan underwriting standards and carefully monitors the performance of the loan portfolio.

Foreclosed Real Estate ("FRE") balances decreased by \$1.1 million at December 31, 2019, from the prior year end and reflected the timing of foreclosures versus sales in 2019. The number of FRE properties decreased from five to one between these two dates.

The Company generally places a loan on nonaccrual status and ceases accruing interest when loan payment performance is deemed unsatisfactory and the loan is past due 90 days or more. There are no loans that are past due 90 days or more and still accruing interest. The Company considers a loan impaired when, based on current information and events, it is probable that the Company will be unable to collect the scheduled payments of principal and interest when due according to the contractual terms of the loan. Had the loans in nonaccrual status performed in accordance with their original terms, additional interest income of \$222,000 and \$75,000 would have been recorded for the years ended December 31, 2019 and December 31, 2018, respectively.

The measurement of impaired loans is based upon the fair value of the collateral or the present value of future cash flows discounted at the historical effective interest rate for impaired loans when the receipt of contractual principal and interest is probable. At December 31, 2019 and December 31, 2018, the Company had \$7.5 million and \$6.0 million in loans, which were deemed to be impaired, having specific reserves of \$830,000 and \$631,000, respectively. The \$1.5 million year-over-year increase in impaired loans was principally due to increases of \$1.6 million, \$111,000, \$91,000, and \$13,000 in impaired commercial real estate loans, impaired other commercial and industrial loans, impaired other consumer loans, and impaired home equity and junior lien impaired loans, respectively. All other loan product segments (which include residential loans and commercial lines of credit) reported modest year-over-year decreases in impaired loans of \$288,000 in aggregate.

The threshold for individually measuring impairment on commercial real estate or commercial loans remains at \$100,000 and for residential mortgage loans remains at \$300,000 at December 31, 2019. The thresholds described above do not apply to loans that have been classified as troubled debt restructurings, which are individually measured for impairment at the time that the restructuring is affected.

Appraisals are obtained at the time a real estate secured loan is originated. For commercial real estate held as collateral, the property is inspected every two years.

Management has identified certain loans with potential credit profiles that may result in the borrowers not being able to comply with the current loan repayment terms and which may result in possible future impaired loan reporting. Potential problem loans increased \$16.9 million to \$31.5 million at December 31, 2019, compared to \$14.6 million at December 31, 2018. These loans have been internally classified as special mention, substandard, or doubtful, yet are not currently considered impaired. The increase in potential problem loans was primarily due to a \$6.5 million increase in potential problem commercial lines of credit, a \$5.3 million increase in potential problem commercial and industrial loans, and a \$4.1 million increase in potential problem commercial real estate loans. The increase in potential problem commercial lines of credit was primarily due to the addition of three relationships rated special mention with an outstanding balance of \$5.2 million. The increase in potential problem commercial real estate loans was primarily due to the addition of two relationships rated special mention with an outstanding balance of \$7.0 million

Total potential problem loans, including impaired loans, were \$38.9 million at December 31, 2019, comprised of special mention, substandard and doubtful loans of \$30.3 million, \$6.8 million and \$1.8 million, respectively. Total potential problem loans, including impaired loans, were \$20.6 million at December 31, 2018, comprised of special mention, substandard and doubtful loans of \$14.3 million, \$4.2 million and \$2.1 million, respectively. Special mention and substandard loans increased \$16.0 million and \$2.6 million, respectively, at December 31, 2019 as compared to December 31, 2018, partially offset by a decrease of \$252,000 in loans classified as doubtful. The increase in loans classified as special mention was primarily due to a \$15.8 million increase in commercial loans, due to the addition of two relationships outstanding comprised of thirteen loans

with an outstanding balance of \$11.9 million. The increase in loans classified as substandard was primarily due to a \$1.6 million increase in commercial loans, due to the addition of one relationship outstanding comprised of seven loans with an outstanding balance of \$1.8 million.

The Company measures delinquency based on the amount of past due loans as a percentage of total loans. The ratio of delinquent loans to total loans increased to 2.09% at December 31, 2019 as compared to 1.81% at December 31, 2018. Delinquent loans increased \$5.1 million year-over-year, primarily due to an increase of \$4.2 million in delinquent commercial loans. At December 31, 2019, there were \$16.3 million in loans past due including \$9.7 million, \$1.4 million and \$5.2 million in loans 30-59 days, 60-89 days, and 90 days and over past due, respectively. At December 31, 2018, there were \$11.2 million in loans past due including \$8.1 million, \$1.1 million and \$2.0 million in loans 30-59 days, 60-89 days, and 90 days and over past due, respectively.

The increase of \$5.1 million in total loans past due at December 31, 2019, as compared to December 31, 2018, was primarily due to an increase of \$3.1 million, \$1.7 million, and \$269,000 in loans 90 days and over past due, 30-59 days past due, and 60-89 days past due, respectively. The increase in loans 90 days and over past due was primarily due to an increase of \$1.9 million in commercial real estate loans. At December 31, 2019 there were eight loans with an outstanding balance of \$2.3 million that were 90 days and over past due, while at December 31, 2018, there were three loans with an outstanding balance of \$323,000. The increase in loans 30-59 days past due was primarily due to an increase of \$3.4 million in commercial lines of credit and a \$1.9 million increase in commercial and industrial loans, partially offset by a decrease of \$3.3 million in commercial real estate loans 30-59 days delinquent. The increase in loans 60-89 days past due was primarily due to an increase of \$271,000 in commercial and industrial loans 60-89 days delinquent, a \$239,000 increase in residential loans 60-89 days delinquent, partially offset by a \$264,000 decrease in commercial real estate loans 60-89 days delinquent.

The ratio of the allowance to loan losses to year end loans at December 31, 2019 was 1.11% as compared to 1.18% at December 31, 2018.

Loans purchased outside of the Bank's general market area are subject to substantial prepurchase due diligence. Homogenous pools of purchased loans are subject to prepurchase analyses led by a team of the Bank's senior executives and credit analysts. In each case, the Bank's analytical processes consider the types of loans being evaluated, the underwriting criteria employed by the originating entity, the historical performance of such loans, especially in the most recent deeply recessionary period, the collateral enhancements and other credit loss mitigation factors offered by the seller and the capabilities and financial stability of the servicing entities involved. From a credit risk perspective, these loan pools also benefit from broad diversification, including wide geographic dispersion, the readily-verifiable historical performance of similar loans issued by the originators, as well as the overall experience and skill of the underwriters and servicing entities involved as counterparties to the Bank in these transactions. The performance of all purchased loan pools are monitored regularly from detailed reports and remittance reconciliations provided at least monthly by the servicing entities.

The projected credit losses related to purchased loan pools are evaluated prior to purchase and the performance of those loans against expectations are analyzed at least monthly. Over the life of the purchased loan pools, the allowance for loan losses is adjusted, through the provision for loan losses, for expected loss experience, over the projected life of the loans. The expected credit loss experience is determined at the time of purchase and is modified, to the extent necessary, during the life of the purchased loan pools. The Bank does not initially increase the allowance for loan losses on the purchase date of the loan pools.

In the normal course of business, the Bank has, from time to time, sold residential mortgage loans and participation interests in commercial loans. As is typical in the industry, the Bank makes certain representations and warranties to the buyer. Pathfinder Bank maintains a quality control program for closed loans and considers the risks and uncertainties associated with potential repurchase requirements to be minimal.

Allowance for Loan Losses

The allowance for loan losses is established through provision for loan losses and reduced by loan charge-offs net of recoveries. The allowance for loan losses represents the amount available for probable credit losses in the Company's loan portfolio as estimated by management. In its assessment of the qualitative factors used in arriving at the required allowance for loan losses, management considers changes in national and local economic trends, the rate of the portfolios' growth, trends in delinquencies and nonaccrual balances, changes in loan policy, and changes in management experience and staffing. These factors, coupled with the recent historical loss experience within the loan portfolio by product segment support the estimable and probable losses within the loan portfolio.

The Company establishes a specific allocation for all commercial loans identified as being impaired with a balance in excess of \$100,000 that are also on nonaccrual or have been risk rated under the Company's risk rating system as substandard, doubtful, or loss. The measurement of impaired loans is based upon either the present value of future cash flows discounted at the historical effective interest rate or the fair value of the collateral, less costs to sell for collateral dependent loans. At December 31, 2019, the Bank's position in impaired loans consisted of 49 loans totaling \$7.5 million. Of these loans, 18 loans, totaling \$1.4 million, were valued using the present value of future cash flows method; and 31 loans, totaling \$6.1 million, were valued based on a collateral analysis. The Company uses the fair value of collateral, less costs to sell to measure impairment on commercial and commercial real estate loans. Residential real estate loans in excess of \$300,000 will also be included in this individual loan review. Residential real estate loans less than this amount will be included in impaired loans if it is part of the total related credit to a previously identified impaired commercial loan. The Company also establishes a specific allowance, regardless of the size of the loan, for all loans subject to a troubled debt restructuring agreement.

The allowance for loan losses at December 31, 2019 and 2018 was \$8.7 million and \$7.3 million, or 1.11% and 1.18% of total year end loans, respectively. The Company recorded \$603,000 in net charge-offs in 2019 as compared to \$1.3 million in net charge-offs in 2018. The ratio of net charge-offs to average loans decreased to 0.09% in 2019 from 0.22% in 2018. The decrease in the year-over-year charge-off rate was due primarily to the charge-off in 2018 of a single fully-reserved commercial real estate loan in the amount of \$596,000 and the charge-off of a single fully-reserved commercial and industrial loan in the amount of \$124,000.

The following table sets forth the allocation of allowance for loan losses by loan category for the years indicated. The allocation of the allowance by category is not necessarily indicative of future losses and does not restrict the use of the allowance to absorb losses in any category.

	2019			2018		2017			2016			2015			
			Percent of			Percent of			Percent of			Percent of			Percent of
		cation	Loans to		llocation	Loans to		location	Loans to	1	Allocation	Loans to		location	Loans to
(Dollars in thousands)		the wance	Total Loans		of the lowance	Total Loans		of the lowance	Total Loans	,	of the Allowance	Total Loans		of the lowance	Total Loans
	Allo			A1			ALL ch			_			A.I.		
Residential real estate	\$	580	27.2%	\$	766	38.5%	\$	865	38.29	6 1	759	42.0%	\$	581	44.0%
Commercial real estate		4,010	32.6%		3,578	34.3%		3,589	33.29	6	2,935	30.6%		2,983	30.1%
Commercial and tax exempt		2,841	19.0%		2,016	18.8%		1,950	19.29	6	2,056	21.0%		1,674	19.3%
Home equity and junior liens		553	6.0%		409	4.3%		514	4.5%	6	331	5.1%		350	5.5%
Consumer loans		413	10.6%		385	4.1%		208	4.9%	6	166	1.3%		118	1.1%
Unallocated (1)		272	4.6%		152					_					
Total	\$	8,669	100.0%	\$	7,306	100.0%	\$	7,126	100.0%	6 \$	6,247	100.0%	\$	5,706	100.0%

⁽¹⁾ Includes loans held-for-sale at December 31, 2019. There were no loans classified as held for sale at December 31, 2018, 2017, 2016 and 2015.

The following table sets forth the allowance for loan losses for the years indicated and related ratios:

(Dollars In thousands)	2019	2018	2017	2016	2015
Balance at beginning of year	\$7,306	\$ 7,126	\$6,247	\$5,706	\$ 5,349
Provisions charged to operating expenses	1,966	1,497	1,769	953	1,350
Recoveries of loans previously charged-off:					
Commercial real estate and loans	1	66	15	31	48
Consumer and home equity	60	58	46	63	69
Residential real estate	2	21	13	13	40
Total recoveries	63	145	74	107	157
Loans charged off:					
Commercial real estate and loans	(294)	(952)	(587)	(69)	(787)
Consumer and home equity	(361)	(265)	(211)	(208)	(129)
Residential real estate	(11)	(245)	(166)	(242)	(234)
Total charged-off	(666)	(1,462)	(964)	(519)	(1,150)
Net charge-offs	(603)	(1,317)	(890)	(412)	(993)
Balance at end of year	\$8,669	\$ 7,306	\$7,126	\$6,247	\$ 5,706
Net charge-offs to average loans outstanding	0.09%	0.22%	0.16%	0.09%	0.25%
Allowance for loan losses to year-end loans	1.11%	1.18%	1.23%	1.27%	1.33%

Bank Owned Life Insurance

The Company held \$17.4 million and \$16.9 million in bank owned life insurance at December 31, 2019 and 2018, respectively. Bank owned life insurance increased \$462,000, or 2.7%, to \$17.4 million at December 31, 2019, as compared to December 31, 2018. The increase was primarily due to the increase in the cash value of the policies recorded as income in 2019.

Deposits

The Company's deposit base is drawn from ten full-service offices in its market area. The deposit base consists of demand deposits, money management and money market deposit accounts, savings, and time deposits. Average deposits increased \$81.1 million, or 11.0%, in 2019. For the year ended December 31, 2019, 55.7% of the Company's average deposit base of \$822.2 million consisted of core deposits. Core deposits, which exclude time deposits, are considered to be more stable and provide the Company with a lower cost of funds than time deposits. The Company will continue to emphasize retail and business core deposits by providing depositors with a full range of deposit product offerings and will maintain its recent focus on deposit gathering within the Syracuse market.

At December 31, 2019, consumer deposits and municipal deposits increased \$44.8 million and \$17.0 million, respectively, partially offset by a decrease in business deposits of \$4.3 million, when compared to December 31, 2018. The increase in consumer deposits reflected the Bank's increased market penetration among non-business customers, particularly in northern Onondaga County, driven by the Bank's focused marketing initiatives. The increase in municipal deposits was driven by seasonally-normal strong deposit inflows related to the Bank's municipal depositor relationships. The decrease in business deposits was related to a variety of factors involving the activities of certain large business customers and was considered by management to be to be transitory in nature.

Total deposits of \$881.9 million at December 31, 2019 consisted in part of \$136.5 million in brokered money market and certificates of deposit accounts. Brokered deposits represented 15.5% of all deposits at

December 31, 2019. Total deposits of \$727.1 million at December 31, 2018 consisted in part of \$41.4 million in brokered money market and certificates of deposit accounts. Brokered deposit represented 5.7% of all deposits at December 31, 2018.

The following table sets forth our deposit composition in dollar amount and as a percentage of total deposits.

	December 31,					
(Dollars in thousands)	2019		2018		2017	
Savings accounts	\$ 81,926	\$ 81,926 9.3%		11.1%	\$ 80,587	11.1%
Time accounts	301,193	34.2%	199,598	27.4%	160,736	22.2%
Time accounts of \$250,000 or more	120,450	13.7%	77,224	10.6%	52,691	7.3%
Money management accounts	14,388	1.6%	13,180	1.8%	14,905	2.1%
MMDA accounts	185,402	21.0%	189,679	26.1%	253,088	35.0%
Demand deposit interest-bearing	64,533	7.3%	57,407	7.9%	66,093	9.1%
Demand deposit noninterest-bearing	107,501	12.2%	103,124	14.2%	89,783	12.4%
Mortgage escrow funds	6,500	0.7%	6,303	0.9%	5,720	0.8%
Total Deposits	\$881,893	100.0%	\$727,060	100.0%	\$723,603	100.0%

At December 31, 2019, time deposit accounts in excess of \$100,000 totaled \$315.3 million, or 74.8% of time deposits and 35.8% of total deposits. At December 31, 2018, these deposits totaled \$156.8 million, or 56.6% of time deposits and 21.6% of total deposits.

The following table indicates the amount of the Company's time deposit accounts of \$100,000 or more by time remaining until maturity as of December 31, 2019:

(In thousands)	
Remaining Maturity:	
Three months or less	\$ 187,610
Three through six months	71,532
Six through twelve months	35,010
Over twelve months	21,153
Total	\$315,305

Borrowings

Borrowings are comprised primarily of advances and overnight borrowing at the FHLBNY.

The following table represents information regarding short-term borrowings for the years ended December 31:

(Dollars in thousands)	2019	2018	2017
Maximum outstanding at any month end	\$39,038	\$39,000	\$41,600
Average amount outstanding during the year	14,835	13,556	31,268
Balance at the end of the period	25,138	39,000	30,600
Average interest rate during the year	2.54%	1.63%	1.34%
Average interest rate at the end of the period	1.80%	2.15%	1.32%

The following table represents information regarding long-term borrowings for the years ended December 31:

(Dollars in thousands)	2019	2018	2017
Maximum outstanding at any month end	\$70,514	\$79,534	\$43,288
Average amount outstanding during the year	64,011	58,316	38,276
Balance at the end of the period	67,987	79,534	43,288
Average interest rate during the year	2.46%	2.00%	1.55%
Average interest rate at the end of the period	2.52%	2.32%	1.68%

Subordinated Loans

The Company has a non-consolidated subsidiary trust, Pathfinder Statutory Trust II, of which the Company owns 100% of the common equity. The Trust issued \$5,000,000 of 30-year floating rate Company-obligated pooled capital securities of Pathfinder Statutory Trust II ("Floating-Rate Debentures"). The Company borrowed the proceeds of the capital securities from its subsidiary by issuing floating rate junior subordinated deferrable interest debentures having substantially similar terms. The capital securities mature in 2037 and are treated as Tier 1 capital by the FDIC and FRB. The capital securities of the trust are a pooled trust preferred fund of Preferred Term Securities VI, Ltd., whose interest rate resets quarterly, and are indexed to the 3-month LIBOR rate plus 1.65%. These securities have a five-year call provision. The Company paid \$213,000 and \$199,000 in interest expense related to this issuance in 2019 and 2018, respectively. The Company guarantees all of these securities.

As currently scheduled, The United Kingdom's Financial Conduct Authority ("FCA"), the organization responsible for regulating LIBOR, will cease publishing LIBOR indices at the end of 2021. The Alternative Reference Rates Committee (the "ARRC"), formed by the FRB and the Federal Reserve Bank of New York, has been charged with developing an alternative rate that will replace LIBOR in the United States (U.S. dollar-denominated LIBOR). The ARRC has identified the Secured Overnight Financing Rate ("SOFR") as the rate that represents best practice for use in U.S. dollar-denominated LIBOR derivatives and other financial contracts. Accordingly, SOFR currently represents the ARRC's preferred alternative to LIBOR. However, the replacement of LIBOR is a highly complex task due to the large number and aggregate magnitude of currently-outstanding LIBOR-based contracts, as well as the broad range of users of these indices. As a result, there are a number of significant objections to the adoption of the SOFR index that have been brought forth for consideration by a wide-range of entities. Management has analyzed the Company's aggregate exposure to instruments that are indexed to LIBOR (including the Company's acquired loan participations, fixed-income investments, hedging instruments and the Floating-Rate Debentures) and concluded that the adoption of SOFR, or another similar index that may ultimately be promulgated by the ARRC, will not materially impact the Company or the results of its operations.

The Company's equity interest in the trust subsidiary is included in other assets on the Consolidated Statements of Financial Condition at December 31, 2019 and 2018. For regulatory reporting purposes, the Federal Reserve has indicated that the preferred securities will continue to qualify as Tier 1 Capital subject to previously specified limitations, until further notice. If regulators make a determination that Trust Preferred Securities can no longer be considered in regulatory capital, the securities become callable and the Company may redeem them at its discretion.

On October 15, 2015, the Company executed a \$10.0 million non-amortizing Subordinated Loan with an unrelated third party that is scheduled to mature on October 1, 2025. The Company has the right to prepay the Subordinated Loan at any time after October 15, 2020 without penalty. The annual interest rate charged to the Company will be 6.25% through the maturity date of the subordinated loan. The Subordinated Loan is senior in the Company's credit repayment hierarchy only to the Company's common equity and preferred stock, and, as a result, qualifies as Tier 2 capital for all future periods when applicable. The Company paid \$172,000 in origination and legal fees as part of this transaction. These fees will be amortized over the life of the

Subordinated Loan through its first call date using the effective interest method. The effective cost of funds related to this transaction is 6.44% calculated under this method. Accordingly, interest expense of \$650,000 and \$647,000 were recorded in the years ended December 31, 2019 and 2018, respectively.

Capital

The Company's shareholders' equity increased \$26.2 million, or 40.8%, to \$90.4 million at December 31, 2019 from \$64.2 million at December 31, 2018. This increase was primarily due to a \$20.2 million increase in additional paid in capital, a \$3.1 million decrease in comprehensive loss, a \$2.7 million increase in retained earnings, and a \$179,000 increase in ESOP shares earnings. Additional paid in capital increased as a result of the proceeds received from the Private Placement of common and preferred shares that took place in May 2019. Comprehensive loss decreased primarily as the result of the appreciation in the fair market value of our available-for-sale investment securities during 2019. The increase in retained earnings resulted from \$4.3 million in net income recorded in 2019. Partially offsetting the increase in retained earnings was \$1.1 million in cash dividends declared on our common stock, \$208,000 in cash dividends declared on our preferred stock, and \$23,000 in cash dividends declared on our issued warrant. In addition, retained earnings was further reduced by a \$239,000 one-time adjustment, at January 1, 2019, related to the cumulative effect of the capitalization of the operating lease right-of-use-assets based on the adoption of ASU 2016-02—Leases (Topic 842).

Risk-based capital provides the basis for which all banks are evaluated in terms of capital adequacy. Capital adequacy is evaluated primarily by the use of ratios which measure capital against total assets, as well as against total assets that are weighted based on defined risk characteristics. The Company's goal is to support growth and expansion activities, while maintaining a strong capital position and exceeding regulatory standards. At December 31, 2019, the Bank exceeded all regulatory required minimum capital ratios and met the regulatory definition of a "well-capitalized" institution. See "Supervision and Regulation – Federal Regulations – Capital Requirements."

As a result of the Dodd-Frank Act, the Company's ability to raise new capital through the use of trust preferred securities may be limited because these securities will no longer be included in Tier 1 capital. In addition, our ability to generate or originate additional revenue producing assets may be constrained in the future in order to comply with capital standards required by federal regulation.

The Bank is subject to various regulatory capital requirements administered by the federal banking agencies. Failure to meet minimum capital requirements can initiate certain mandatory and possibly additional discretionary actions by regulators that, if undertaken, could have a direct material effect on the Company's consolidated financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Bank must meet specific capital guidelines that involve quantitative measures of its assets, liabilities, and certain off-balance sheet items as calculated under regulatory accounting practices. The capital amounts and classifications are also subject to qualitative judgments by the regulators about components, risk weightings, and other factors.

Quantitative measures established by regulation to ensure capital adequacy require the Bank to maintain amounts and ratios of total and Tier 1 capital (as defined in the regulations) to risk-weighted assets (as defined), and of Tier 1 capital (as defined) to average assets (as defined).

As of December 31, 2019, the Bank's most recent notification from the Federal Deposit Insurance Corporation categorized the Bank as "well-capitalized", under the regulatory framework for prompt corrective action. To be categorized as "well-capitalized", the Bank must maintain total risk-based, Tier 1 risk-based and Tier 1 leverage ratios. There are no conditions or events since that notification that management believes have changed the Bank's category.

The regulations also impose a "capital conservation buffer" consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets above the amount necessary to meet its minimum risk-based capital

requirements. The buffer is separate from the capital ratios required under the Prompt Corrective Action ("PCA") standards and imposes restrictions on dividend distributions and discretionary bonuses. In order to avoid these restrictions, the capital conservation buffer effectively increases the minimum the following capital to risk-weighted assets ratios: (1) Core Capital, (2) Total Capital and (3) Common Equity. The capital conservation buffer requirement is now fully implemented at 2.5% of risk-weighted assets as of January 1, 2019. At December 31, 2019, the Bank exceeded all current regulatory required minimum capital ratios, including the capital buffer requirements.

Liquidity

Liquidity management involves the Company's ability to generate cash or otherwise obtain funds at reasonable rates to support asset growth, meet deposit withdrawals, maintain reserve requirements, and otherwise operate the Company on an ongoing basis. The Company's primary sources of funds are deposits, borrowed funds, amortization and prepayment of loans and maturities of investment securities and other short-term investments, and earnings and funds provided from operations. While scheduled principal repayments on loans are a relatively predictable source of funds, deposit flows and loan prepayments are greatly influenced by general interest rates, economic conditions and competition. The Company manages the pricing of deposits to maintain a desired deposit balance. In addition, the Company invests excess funds in short-term interest-earning and other assets, which provide liquidity to meet lending requirements.

The Company's liquidity has been enhanced by its ability to borrow from the FHLBNY, whose competitive advance programs and lines of credit provide the Company with a safe, reliable, and convenient source of funds. A significant decrease in deposits in the future could result in the Company having to seek other sources of funds for liquidity purposes. Such sources could include, but are not limited to, additional borrowings, brokered deposits, negotiated time deposits, the sale of "available-for-sale" investment securities, or the sale of loans. Such actions could result in higher interest expense costs and/or losses on the sale of securities or loans.

For the year ended December 31, 2019, cash and cash equivalents decreased by \$6.2 million. The Company reported net cash flows from financing activities of \$148.5 million generated principally by increased brokered deposit balances of \$95.1 million, increased customer deposit balances of \$59.7 million, and by net proceeds from the Private Placement offering totaling \$19.6 million. This was partially offset by an aggregate decrease in net cash of \$25.9 million from all other financing sources, including dividends paid to common and preferred shareholders, and the holder of the Warrant of \$1.2 million. Additionally, \$8.1 million was provided through operating activities. These cash flows were primarily invested in: (1) net increases in loans outstanding of \$162.1 million, and (2) \$174.6 million in purchases of investment securities in 2019.

Certificates of deposit due within one year of December 31, 2019 totaled \$386.9 million, representing 91.8% of certificates of deposit at December 31, 2019, an increase from 67.6% at December 31, 2018. We believe the large percentage of certificates of deposit that mature within one year reflect customers' hesitancy to invest their funds for long periods in the current low interest rate environment. If these maturing deposits do not remain with us, we will be required to seek other sources of funds, including other certificates of deposit and borrowings. Depending on market conditions, we may be required to pay higher rates on such deposits or other borrowings than we currently pay on the certificates of deposit due on or before December 31, 2020.

The Company is a separate legal entity from the Bank and must provide for its own liquidity. In addition to its operating expenses, the Company is responsible for paying any dividends declared to its shareholders and making payments on its subordinated loans. The Company may repurchase shares of its common stock. The Company's primary sources of funds are the proceeds it retained from the Private Placement, interest and dividends on securities and dividends received from the Bank. The amount of dividends that the Bank may declare and pay to the Company in any calendar year, without prior regulatory approval, cannot exceed net income for that year to date plus retained net income (as defined) for the preceding two calendar years. The Company believes that this restriction will not have an impact on the Company's ability to meet its ongoing cash

obligations. At December 31, 2019 and 2018, the Company had cash and cash equivalents of \$20.2 million and \$26.3 million, respectively.

The Bank has a number of existing credit facilities available to it. At December 31, 2019, total credit available under the existing lines of credit was approximately \$173.2 million at FHLBNY, the FRB, and two other correspondent banks. At December 31, 2019, the Company had \$93.1 million of the available lines of credit utilized, including encumbrances supporting the outstanding letters of credit, described above, on its existing lines of credit with the remainder of \$80.1 million available.

The Asset Liability Management Committee of the Company is responsible for implementing the policies and guidelines for the maintenance of prudent levels of liquidity. As of December 31, 2019, management reported to the board of directors that the Bank was in compliance with its liquidity policy guidelines.

Off-balance Sheet Arrangements

The Bank is also a party to financial instruments with off-balance sheet risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit and standby letters of credit. At December 31, 2019, the Bank had \$133.9 million in outstanding commitments to extend credit and standby letters of credit.

Security Ownership of Certain Beneficial Owners

Persons and groups who beneficially own in excess of 5% of the Company's common stock are required to file Schedule 13G or Schedule 13D reports with the Securities and Exchange Commission (the "SEC") regarding such ownership. The following table sets forth, as of the date of the most recent reports, the shares of common stock beneficially owned by each person or entity that was the beneficial owner of more than 5% of our outstanding shares of common stock. None of the shares beneficially owned by directors, executive officers or nominees to the board of directors have been pledged as security or collateral for any loans.

The following table represents the ownership of our Schedule 13D and 13G filers as of August 14, 2020:

Name and Address of Beneficial Owners	Amount Beneficially Owned	Percentage of Shares of Common Stock Outstanding
Castlecreek Capital Partners VII, LP (1)	464,710	9.8%
Castlecreek Capital VII LLC		
John M. Eggemeyer		
John T. Pietrzak 6051 El Tordo		
PO Box 1329		
Rancho Santa Fe, CA 92067		
Pathfinder Bank Employee Stock Ownership		
Plan Trust (2)	433,395	9.1%
c/o Pentegra Services, Inc. 2 Enterprise Drive,		
Suite 408		
Shelton, CT 06484		
Minerva Advisors, LLC (3)	251,255	5.3%
Minerva Group, LP		
Minerva GP, LP		
Minerva GP, Inc.		
David P. Cohen 50 Monument Road, Suite		
201		
Bala Cynwyd, PA 19004		

- (1) Based on information reported on a Schedule 13D filed with the Securities and Exchange Commission on May 15, 2019, Castle Creek Capital Partners VII, LP, Castle Creek Capital VII, LLC, John M. Eggemeyer and John T. Pietrzak reported shared voting power for 464,710 shares of our common stock and shared dispositive power over 464,710 shares of our common stock.
- (2) Based on information reported on a Schedule 13G/A filed with the Securities and Exchange Commission on February 11, 2020, Pentegra Trust Company, the trustee for the Pathfinder Bank Employee Stock Ownership Plan, reported sole voting power for 121,250 shares of our common stock, shared voting power for 312,145 shares of our common stock, sole dispositive power over 415,284 shares of our common stock and shared dispositive power over 18,111 shares of our common stock.
- (3) Based on information reported on a Schedule 13G/A filed with the Securities and Exchange Commission on February 13, 2020, Minerva Advisors, LLC, Minerva Group, LP, Minerva GP, LP, Minerva GP, Inc., and David P. Cohen reported sole dispositive and voting power with respect to 182,166 shares of our common stock and Minerva Advisors, LLC and David P. Cohen reported shared dispositive and voting power with respect to 69,089 shares of our common stock.

Security Ownership of Management

The following table sets forth as of August 14, 2020, the shares of common stock beneficially owned by directors, executive officers and other management for whom we file Section 16 reports.

	Amount of Shares Owned and Nature of Beneficial	Number of Unexercised Stock Options which are included in Beneficial	Percentage of Shares of Common Stock
Name and Address of Beneficial Owners Directors and Executive Officers (3)	Ownership (1)	Ownership (2)	Outstanding
	27.496	15 264	0.79
David A. Ayoub (4)	37,486	15,264	
William A. Barclay (5)	88,288	7,028	1.86
Chris R. Burritt (6)	54,229	7,028	1.14
John P. Funiciello (7)	43,075	7,028	0.91
Adam C. Gagas (8)	195,442	13,616	4.11
George P. Joyce (9)	134,228	7,028	2.82
Melanie Littlejohn (10)	9,840	7,028	0.21
John F. Sharkey, III (11)	47,428	13,616	1.00
Lloyd "Buddy" Stemple (12)	69,108	7,028	1.45
Thomas W. Schneider (13)	80,996	15,064	1.70
James A. Dowd (14)	57,999	15,273	1.22
Ronald Tascarella (15)	106,982	9,036	2.25
Daniel R. Phillips (16)	47,942	26,824	1.01
Calvin L. Corridors (17)	42,648	13,244	0.90
Walter F. Rusnak (18)	50,469	8,696	1.06
William O'Brien (19)	25,744	13,244	0.54
All Directors and Executive Officers as a			
Group (16 persons)	1,091,904	186,045	22.97
Section 16 Filers			
Lisa A. Kimball	12,070	2,108	0.25
Robert G. Butkowski	24,526	2,108	0.52
Ronald G. Tascarella	18,645	1,581	0.39

⁽¹⁾ A person is deemed to be the beneficial owner, for purposes of this table, of any shares of common stock if he has shared voting or investment power with respect to such security, or has a right to acquire beneficial

ownership at any time within 60 days from August 14, 2020. 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. This table includes all shares held directly as well as by spouses and minor children, in trust and other indirect ownership, over which shares the named individuals effectively exercise sole or shared voting and investment power. Unless otherwise indicated, the named individual has sole voting and investment power. ESOP shares allocated to the officers are also included within their respective totals.

- (2) These options are exercisable within 60 days of August 14, 2020. They cannot be voted until exercised.
- (3) The mailing address for each person listed is 214 West First Street, Oswego, New York 13126.
- (4) Mr. Ayoub's shares include 17,763 in a 401(k) plan and 1,647 in an IRA. He also has 703 restricted stock units which have not vested.
- (5) Mr. Barclay has sole voting and investment power over 19,284 shares, shared investment and voting power over 57,682 shares and custodial voting power over 4,294 shares. He also has 703 restricted stock units which have not vested.
- (6) Mr. Burritt's shares include 25,000 in an IRA. He also has 703 restricted stock units which have not vested.
- (7) Mr. Funiciello's shares include 5,000 in an IRA. He also has 703 restricted stock units that have not vested.
- (8) Mr. Gagas's shares include 14,300 in an IRA. He has sole voting and investment power over 32,161 shares and shared investment and voting power over 149,664 shares. He also has 703 restricted stock units that have not vested.
- (9) Mr. Joyce's shares include 11,888 in an IRA. He has sole voting and investment power over 25,200 shares and shared investment and voting power over 102,000 shares. He also has 703 restricted stock units that have not vested.
- (10) Ms. Littlejohn has 703 restricted stock units that have not vested.
- (11) Mr. Sharkey's shares include 20,000 in an IRA. He also has 703 restricted units that have not vested.
- (12) Mr. Stemple has sole voting and investment power over 59,580 shares and shared investment and voting power over 2,500 shares. He also has 703 restricted stock units that have not vested.
- (13) Mr. Schneider's shares include 23,362 in Pathfinder Bank's 401(k) plan and 16,977 in Pathfinder Bank's ESOP. He also has 6,780 restricted stock units that have not vested.
- (14) Mr. Dowd's shares include 15,727 in Pathfinder Bank's 401(k) plan and 15,947 in Pathfinder Bank's ESOP. He also has 3,165 restricted stock units that have not vested.
- (15) Mr. Tascarella's shares include 20,292 in Pathfinder Bank's 401(k) plan and 6,173 in Pathfinder Bank's ESOP. He has sole voting and investment power over 92,595 shares and shared investment and voting power over 5,000 shares. He also has 3,165 restricted stock units that have not vested.
- (16) Mr. Phillip's shares include 6,021 in Pathfinder Bank's 401(k) plan and 9,881 in Pathfinder Bank's ESOP. He also has 3,165 restricted stock units that have not vested.
- (17) Mr. Corrider's shares include 15,974 in Pathfinder Bank's 401(k) plan and 4,188 in Pathfinder Bank's ESOP. He also has 842 restricted stock units that have not vested.
- (18) Mr. Rusnak's shares include 20,000 in an IRA and 1,773 in Pathfinder Bank's ESOP.
- (19) Mr. O'Brien's shares include 3,255 in Pathfinder Bank's 401(k) plan and 5,869 in Pathfinder Bank's ESOP. He also has 842 restricted stock units that have not vested.

Summary Compensation Table

The following table shows the compensation of Thomas W. Schneider, our principal executive officer, and the two other most highly compensated executive officers ("Named Executive Officers") that received total compensation of \$100,000 or more during the past fiscal year for services to Pathfinder Bancorp, Inc. or any of its subsidiaries during the years ended December 31, 2019 and 2018, respectively.

Summary Compensation Table										
Name and Principal Position	Year	Salary (\$)	Bonus (\$) (1)	Stock Options (\$)	Restricted Stock Units (\$)	Non-Qualified Deferred Compensation Earnings (\$) (2)	All Other Compensation (\$) (3)	Total (\$)		
Thomas W. Schneider,	2019	360,350	60,300			4,302	126,804	551,756		
President and Chief Executive Officer	2018	360,000	58,100	_	_	4,475	128,359	550,934		
James A. Dowd,	2019	210,000	30,100	_	_	5,538	86,529	332,167		
Executive Vice President Chief Operating Officer	2018	205,000	30,000	_	_	5,834	87,578	328,412		
Ronald Tascarella,	2019	210,000	28,000	_	_	1,522	55,748	295,270		
Executive Vice President Chief Banking Officer	2018	205,000	30,000	_	_	1,418	60,179	296,597		

⁽¹⁾ Current year performance-based bonus awards were paid during March 2020.

⁽³⁾ All Other Compensation consists of the following for each Named Executive Officer for the year ended December 31, 2019:

		Employee Savings Plan Company Contribution	Automobile Expense Reimbursement	Club Dues	Life Insurance Premium	*ESOP Allocation	Supplemental Executive Retirement Plan	Total
Named Executive	Year	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)
Thomas W. Schneider	2019	21,000	20,908	5,382	1,222	15,785	62,507	126,804
James A. Dowd	2019	17,845	22,432	_	574	15,262	30,416	86,529
Ronald Tascarella	2019	12,291	_	_	1,022	12,019	30,416	55,748

^{*} The ESOP value is calculated based on the Company's stock price of \$13.90 per share as of December 31, 2019.

Employment Agreement. The Company and its operating subsidiary, Pathfinder Bank, entered into an employment agreement with Thomas W. Schneider. The agreement has an initial term of three years. Unless notice of non-renewal is provided, the agreement renews annually. The agreement provides for the payment of a base salary, which will be reviewed at least annually, and which may be increased. Under the agreement, the 2020 base salary for Mr. Schneider is \$360,350. In addition to the base salary, the agreement provides for, among other things, participation in employee and welfare benefit plans and incentive compensation and bonus plans applicable to senior executive employees, and reimbursement of business expenses.

⁽²⁾ The non-qualified deferred compensation earnings represents the above market or preferential earnings on compensation that was deferred by each Named Executive Officer.

Mr. Schneider is entitled to severance payments and benefits in the event of termination of employment under specified circumstances. In the event his employment is terminated for reasons other than for cause, disability or retirement, or in the event he resigns during the term of the agreement following:

- the failure to elect or re-elect or to appoint or re-appoint him to his executive position;
- the failure to nominate him to be elected or re-elected as a director of the Bank or the Company;
- a material change in his functions, duties, or responsibilities, which change would cause his position to become one of lesser responsibility, importance or scope;
- the liquidation or dissolution of the Company or the Bank, other than liquidations or dissolutions that are caused by reorganizations that do not affect his status;
- a relocation of his principal place of employment by more than 30 miles from its location as of the date of the agreements; or
- a material breach of the agreements by the Company or the Bank.

Mr. Schneider will be entitled to a severance payment equal to three times the sum of his base salary and the highest rate of bonus awarded to him during the prior three years, payable as a single cash lump sum distribution within 30 days following his date of termination. In addition, the Company or the Bank will continue to provide him with continued life insurance and non-taxable medical and dental coverage for 36 months.

If he voluntarily resigns from his employment with the Company and the Bank, (without the occurrence of the specified circumstances listed above) the Board will have the discretion to provide severance pay to him, provided, however, that such amount does not exceed three times the average of the executive's three preceding years' base salary, including bonuses, any other cash compensation paid during such years, and the amount of contributions made on behalf of him to any employee benefit plans maintained by the Company or the Bank during such years.

Upon the occurrence of a change in control of the Company or the Bank followed by the Mr. Schneider's termination of employment for any reason, other than for cause, he will be entitled to receive a single cash lump distribution equal to 2.99 times his average base salary over the previous five years, including bonuses, any other cash compensation paid to him during such years, and the amount of contributions made on behalf of him to any employee benefit plans maintained by the Company or the Bank during such years. In addition, the Company or the Bank will continue to provide him with continued life insurance and non-taxable medical and dental coverage for 36 months. In the event payments made to him include an "excess parachute payment," as defined in Section 280G of the Internal Revenue Code, the payment will be reduced by the minimum dollar amount necessary to avoid this result. Should he become disabled, he would be entitled to receive his base salary for one year, where the payment of base salary will commence within 30 days from the date he is determined to be disabled, and will be payable in equal monthly installments.

Upon his voluntary resignation from employment (without the occurrence of the specified circumstances listed above) he agrees not to compete with the Company or the Bank for one year following his resignation.

Change of Control Agreements. The Company and Pathfinder Bank have entered into Change of Control Agreements with James A. Dowd and Ronald Tascarella which provide certain benefits to them should they be "dismissed" from employment within a twelve month period following a change of control of the Company or the Bank. Although "dismissal" does not include a termination for cause or voluntary termination, it does include the executive's resignation as a result of:

• a material change in the executive's functional duties or responsibilities which would cause the executive's position to become one of lesser responsibility, importance of scope;

- a relocation of the executive's principal place of employment by more than 30 miles from its location as of the date of the agreement, or
- a material reduction in the benefits to the executive as of the date of the agreement.

In the event of such dismissal, the executive, or his beneficiary should he die subsequent to the dismissal, is entitled to a lump sum payment equal to two times the executive's most recent annual base salary plus bonuses and any other cash compensation paid to the executive within the most recent twelve (12) month period. The executive is also entitled to continued life, medical and dental coverage for a period of twenty four (24) months subsequent to the dismissal, and will become fully vested in any stock option plans, deferred compensation plans, or restricted stock plans in which he participates.

Defined Contribution Supplemental Retirement Income Agreements. The Bank adopted a Supplemental Executive Retirement Plan (the "SERP"), effective January 1, 2014. The SERP benefits certain key senior executives of the Bank who are selected by the Board to participate, including our Named Executive Officers, Thomas W. Schneider, Ronald Tascarella and James A. Dowd. The SERP is intended to provide a benefit from the Bank upon retirement, death, disability or voluntary or involuntary termination of service (other than "for cause"), subject to the requirements of Section 409A of the Internal Revenue Code. Accordingly, the SERP obligates the Bank to make a contribution to each executive's account on the last business day of each calendar year. In addition, the Bank may, but is not required to, make additional discretionary contributions to the executive's accounts from time to time. All executives currently participating in the SERP, including the Named Executive Officers, are fully vested in the Bank's contribution to the plan. In the event the executive is terminated involuntarily or resigns for good reason within 24 months following a change in control, the Bank is required to make additional annual contributions equal to the lesser of the contributions required for: (1) three years or (2) the number of years remaining until the executive's benefit age, subject to potential reduction to avoid an excess parachute payment under Code Section 280G. In the event of the executive's death, disability or termination within 24 months after a change in control, the executive's account will be paid in a lump sum to the executive or his beneficiary, as applicable. In the event the executive is entitled to a benefit from the SERP due to retirement or other termination of employment, the benefit will be paid either in a lump sum or in monthly installments for 10 years as detailed in the executive's participant agreement.

Executive Deferred Compensation Plan. Pathfinder Bank maintains an Executive Deferred Compensation Plan for a select group of management employees, including our Named Executive Officers. A participant in the plan is eligible to defer, on a monthly basis, a percentage of compensation received from the Bank, up to \$750. The participant's deferred compensation will be held by the Bank subject to the claims of the Bank's creditors in the event of the Bank's insolvency.

Upon the earlier of the date on which the participant terminates employment with the Bank or attains his or her benefit age (as designated by the participant upon joining the plan), the participant will be entitled to his or her deferred compensation benefit, which will commence on the date the participant attains his or her elected benefit age and will be payable in monthly installments for 10 years. In the event of a change in control of the Company or the Bank followed by the participant's termination of employment within 36 months thereafter, the participant will receive a deferred compensation benefit calculated as if the participant had made elective deferrals through his or her benefit age. Such benefit will commence on the date the participant attains his or her benefit age and will be payable in monthly installments for 10 years. If the participant dies after commencement of payment of the deferred compensation benefit, the Bank will pay the participant's beneficiary the remaining payments that were due.

In the event the participant becomes disabled, the participant will be entitled to receive the deferred compensation benefit as of the participant's date of disability. Such benefit will commence within 30 days following the date on which the participant is disabled and will be payable in monthly installments for 10 years. If the participant dies prior to the commencement of payment of the deferred compensation benefit, the participant's beneficiary will be entitled to receive a survivor benefit.

2010 Stock Option Plan. The Pathfinder Bancorp, Inc. 2010 Stock Option Plan (the "2010 Stock Option Plan") was approved at our 2010 Annual Meeting. The 2010 Stock Option Plan authorized the issuance of up to 150,000 shares of common stock pursuant to grants of stock option awards to our senior executive officers and outside directors. The options that were granted vest over 5 years (20% per year for each year of the participant's service), had an exercise price of \$9.00, (the market price on the date of the grant) and have an exercise period of 10 years from the date of the grant, June 23, 2011. As a result of the second step conversion of Pathfinder Bancorp, MHC into a fully-converted stock holding company as Pathfinder Bancorp, Inc., both the number of options and the exercise price were adjusted by the exchange ratio of 1.6472. All of the options authorized under this plan have been granted.

2016 Equity Incentive Plan. The Pathfinder Bancorp, Inc. 2016 Equity Incentive Plan (the "2016 Equity Incentive Plan") was approved at our 2016 Annual Meeting. The 2016 Equity Incentive Plan authorized the issuance of up to 263,605 shares of common stock pursuant to grants of stock option awards to our senior executive officers and outside directors. The options that were granted to executives vest over seven years (14.3% per year for each year of the participant's service), have an exercise price of \$11.35, (the market price on the date of the grant) and an exercise period of 10 years from the date of the grant, May 6, 2016.

The 2016 Equity Incentive Plan also authorizes the issuance of 105,442 shares of common stock pursuant to grants of restricted stock units to our senior executive officers and outside directors. The restricted stock units granted to executives vest over seven years (14.3% per year for each year of the participant's service).

Outstanding Equity Awards at Year-End. The following table sets forth information with respect to our outstanding equity awards as of December 31, 2019 for the Named Executive Officers under our 2010 Stock Option Plan and 2016 Equity Incentive Plan.

Outstanding Equity Awards at Fiscal Year-End Restricted Shares Options Awards Market Number of Number of Number of value of securities underlying securities underlying shares or shares or units of units of Option stock that options options exercise Option have not have not exercisable (1) unexercisable price expiration vested vested (2) Name (#) (#) (\$) date (#) (\$) Thomas W. Schneider 5.46 06/23/21 11,298 15,063 11.35 05/06/26 9,039 125,642 James A. Dowd 6,237 5.46 06/23/21 6,777 9,039 11.35 05/06/26 4,219 58,644 Ronald Tascarella 5.46 06/23/21 6,777 9,039 11.35 05/06/26 58,644 4,219

Defined Benefit Plan. Pathfinder Bank maintains a tax-qualified noncontributory defined benefit plan ("Retirement Plan"). The Company "froze" the Retirement Plan effective June 30, 2012 ("Plan Freeze Date"). After the Plan Freeze Date, no employee is permitted to commence or recommence participation in the Plan and no further benefits accrue to any plan participants. Employment service after the Plan Freeze Date does continue to be recognized for vesting purposes, however. Prior to the Plan Freeze Date, all salaried employees age 21 or older who worked for the Bank for at least one year and were credited with 1,000 or more hours of employment during the year were eligible to accrue benefits under the Retirement Plan.

At the normal retirement age of 65, the Retirement Plan is designed to provide a life annuity. The retirement benefit provided is equal to 1.5% of a participant's average monthly compensation for periods after May 1, 2004,

⁽¹⁾ All 2010 stock options were fully vested as of June 23, 2016.

⁽²⁾ Reflects the per share value of the restricted stock units as of December 31, 2019 of \$13.90.

through the plan freeze date described above and 2.0% of the participant's average monthly compensation for credited service prior to May 1, 2004 based on the average of the three consecutive years during the last 10 years of employment which provides the highest monthly average compensation multiplied by the participant's years of credited service (not to exceed 30 years) to the normal retirement date. Retirement benefits also are payable upon retirement due to early and late retirement. Benefits also are paid from the Retirement Plan upon a Participant's disability or death. A reduced benefit is payable upon early retirement at or after age 60. Upon termination of employment other than as specified above, a participant who was employed by the Bank for a minimum of five years is eligible to receive his or her accrued benefit reduced for early retirement or a deferred retirement benefit commencing on such participant's normal retirement date. Benefits are payable in various annuity forms. On December 31, 2019, the market value of the Retirement Plan trust fund was approximately \$17.0 million. The Company made no contribution to the defined benefit pension plan during 2019.

Employee Savings Plan. Pathfinder Bank maintains an Employee Savings Plan which is a profit sharing plan with a "cash or deferred" feature that is tax-qualified under Section 401(k) of the Internal Revenue Code (the "401(k) Plan"). All employees who have attained age 21 and have completed 90 days of employment during which they worked at least 1,000 hours are eligible to participate.

Participants may elect to defer a percentage of their compensation each year instead of receiving that amount in cash, in an amount up to 75% of their compensation to the 401(k) Plan, provided that the amount deferred did not exceed \$19,000 for 2019. In addition, for participants who are age 50 or older by the end of any taxable year, the participant may elect to defer additional amounts (called "catch-up contributions") to the 401(k) Plan. The "catch-up contributions" may be made regardless of any other limitations on the amount that a participant may defer to the 401(k) Plan. The maximum "catch-up contribution" that a participant could make in 2019 was \$6,000. For these purposes, "compensation" includes total compensation (including salary reduction contributions made under the 401(k) Plan or the flexible benefits plan sponsored by the Bank), but not in excess of \$280,000 for 2019. The Bank generally provides a match of 100% of the first 3% of the participating employees salary, plus 50% of the next 3% of the participating employees salary. All employee contributions and earnings thereon are fully and immediately vested. Employer matching contributions vest at the rate of 20% per year beginning at the end of a participant's first year of service with the Bank until a participant is 100% vested after five years of service. Participants also will vest in employer matching contributions when they reach the normal retirement age of 65 or later, or upon death or disability regardless of years of service. To partially offset the impact on employees due to the Retirement Plan freeze discussed above, the Company, on January 1, 2013, began making a 3% safe harbor contribution to all eligible participants in addition to the match contributions described above. The employer safe harbor contribution is fully vested at all times.

For the plan year ended December 31, 2019, the Bank made a matching contribution in the amount of \$393,000 to the 401(k) Plan. In addition, the Company made a safe harbor contribution in the amount of \$291,000 for the 2019 plan year.

Employee Stock Ownership Plan. Pathfinder Bank maintains an employee stock ownership plan ("ESOP"). Employees who are at least 21 years old with at least one year of employment with the Bank are eligible to participate. On April 6, 2011, the ESOP acquired 125,000 shares of common stock to replenish its ability to make stock contributions to participants' accounts. The shares were acquired pursuant to a loan obtained from a third party lender. In connection with the second step conversion and offering, the ESOP purchased an additional 105,442 shares, which equaled 4% of the shares issued in the offering. In connection with such purchase, the ESOP borrowed sufficient funds from the Company to both refinance the remaining outstanding balance on the third-party loan and purchase the additional shares. The Bank makes annual contributions to the ESOP which contributions are used by the ESOP to repay the ESOP loan.

Benefits under the ESOP become vested in an ESOP participant at the rate of 20% per year, starting upon an employee's completion of one year of credited service, and will be fully vested upon completion of five years of credited service. Participants' interest in their account under the ESOP will also fully vest in the event of

termination of service due to their normal retirement, death, disability, or upon a change in control (as defined in the plan). Vested benefits will be payable generally upon the participants' termination of employment with the Bank, and will be paid in the form of common stock, or to the extent participants' accounts contain cash, benefits will be paid in cash. However, participants have the right to elect to receive their benefits entirely in the form of cash or common stock, or a combination of both.

Directors' Compensation

Each non-employee director receives an annual retainer of \$15,000, a meeting fee of \$800 for each Board meeting attended and \$600 for each committee meeting attended, except for Executive Loan Committee fees which are \$300 per meeting. The Board Chair receives an additional retainer of \$10,100. The Audit Committee Chairman receives an additional retainer of \$4,100 and the chairman of all other committees receives an additional \$100 for each committee meeting in which they serve in the capacity of committee chairman. Employee directors do not receive any fees. We paid a total of \$321,800 in director fees during the year ended December 31, 2019.

Set forth below is director compensation for each of our non-employee directors for the year ended December 31, 2019.

		Fees earned or paid in cash	Non-qualified deferred compensation earnings (1)	All Other Compensation(2)	<u>Total</u>
Name	Year	(\$)	(\$)	(\$)	(\$)
David A. Ayoub (3)	2019	40,100	5,181	_	45,281
William A. Barclay (4)	2019	32,900	2,502	_	35,402
Chris R. Burritt (5)	2019	49,300	21,253	_	70,553
John P. Funiciello (6)	2019	35,700	5,181	_	40,881
Adam C. Gagas (7)	2019	30,800	_	_	30,800
George P. Joyce (8)	2019	37,800	7,737	_	45,537
Melanie Littlejohn (9)	2019	30,400	_	_	30,400
John F. Sharkey (10)	2019	35,700	2,725	_	38,425
Lloyd "Buddy" Stemple (11)	2019	29,100	8,804	_	37,904

⁽¹⁾ The non-qualified deferred compensation earnings represents the above market or preferential earnings on compensation that was deferred by each director to the Trustee Deferred Fee Plan.

- (2) No director received perquisites and any other personal benefits that exceeded, in the aggregate, \$10,000.
- (3) Mr. Ayoub has 17,023 outstanding stock options and 1,406 restricted stock units outstanding at December 31, 2019.
- (4) Mr. Barclay has 17,023 outstanding stock options and 1,406 restricted stock units outstanding at December 31, 2019.
- (5) Mr. Burritt has 8,787 outstanding stock options and 1,406 restricted stock units outstanding at December 31, 2019.
- (6) Mr. Funiciello has 17,023 outstanding stock options and 1,406 restricted stock units outstanding at December 31, 2019.
- (7) Mr. Gagas has 17,023 outstanding stock options and 1,406 restricted stock units outstanding at December 31, 2019.
- (8) Mr. Joyce has 15,287 outstanding stock options and 1,406 restricted stock units outstanding at December 31, 2019.
- (9) Ms. Littlejohn has 8,787 outstanding stock options and 1,406 restricted stock units outstanding at December 31, 2019.
- (10) Mr. Sharkey has 17,023 outstanding stock options and 1,406 restricted stock units outstanding at December 31, 2019.

(11) Mr. Stemple has 17,023 outstanding stock options and 1,406 restricted stock units outstanding at December 31, 2019.

Director fees are reviewed annually by the Compensation Committee for recommendation to the Board of Directors. The Committee reviews relevant peer group data similar to that used in the executive compensation review. The Committee believes that an appropriate compensation is critical to attracting, retaining and motivating directors who have the qualities necessary to direct the Company.

Trustee (Director) Deferred Fee Plan. Pathfinder Bank maintains the Trustee Deferred Fee Plan for members of the Boards of Directors of Pathfinder Bank and the Company. A participant in the plan is eligible to defer, on a monthly basis, up to the lesser of (i) \$2,000 or (ii) 100% of the monthly fees the participant would be entitled to receive each month. The participant's deferred fees will be held by the Bank subject to the claims of the Bank's creditors in the event of the Bank's insolvency.

Upon the earlier of the date on which the participant's services are terminated or the participant attains his or her benefit age (as designated by the participant upon joining the plan), the participant will be entitled to his or her deferred compensation benefit, which will commence on the date the participant attains his or her elected benefit age and will be payable in monthly installments for 10 years. In the event of a change in control of the Company or the Bank followed by the participant's termination of services within 36 months thereafter, the participant will receive a deferred compensation benefit calculated as if the participant had made elective deferrals through his or her benefit age. Such benefit will commence on the date the participant attains his or her benefit age and will be payable in monthly installments for 10 years. If the participant dies after commencement of payment of the deferred compensation benefit, the Bank will pay the participant's beneficiary the remaining payments that were due.

In the event the participant becomes disabled, the participant will be entitled to receive the deferred compensation benefit as of the date of the participant's disability. Such benefit will commence within 30 days following the date on which the participant is determined to be disabled and will be payable in monthly installments for 10 years. If the participant dies prior to the commencement of payment of the deferred compensation benefit, the participant's beneficiary will be entitled to receive a survivor benefit.

Related Party Transactions

There were no transactions or series of transactions during the Company's last two fiscal years or any currently proposed transaction where the Company was or is a participant and the amount involved exceeds \$120,000, and in which any related person had or will have a direct or indirect material interest.

The Sarbanes-Oxley Act of 2002 generally prohibits an issuer from (i) extending or maintaining credit; (ii) arranging for the extension of credit; or (iii) renewing an extension of credit in the form of a personal loan for an officer or director. There are several exceptions to this general prohibition, however, one of which is applicable to us. This prohibition does not apply to loans made by a depository institution that is insured by the FDIC and is subject to the insider lending restrictions of the Federal Reserve Act. Regulations permit executive officers and directors to receive the same loan terms through programs that are widely available to other employees, as long as the executive officer or director is not given preferential treatment compared to the other participating employees. The Bank has made loans to each of the following officers and/or directors or their immediate families: David Ayoub, Chris Burritt, Calvin Corriders, James Dowd, John Funiciello, George Joyce, Daniel Phillips, Thomas Schneider, John Sharkey III, Lloyd Stemple, Walter Rusnak and Ronald Tascarella.

After one year of service at the Bank, full-time employees and directors are entitled to receive a primary residence mortgage loan at an interest rate of 0.50% below market, consistent with applicable laws and regulations.

The chart below lists the executive officers and directors who participated in the employee mortgage loan program during the years ended December 31, 2019 and 2018 and certain information with respect to their loans. No other directors or executive officers participated in the employee mortgage loan program during the years ended December 31, 2019 and 2018.

	Largest Aggregate Balance 01/01/18	Interest	Non- Employee	Principal Balance	Principal Paid 01/01/18 to	Interest Paid 01/01/18 to
Name	to 12/31/19	Rate	Interest Rate %	12/31/2019 ©	12/31/2019	12/31/2019
	104000	70		454.004		10.010
Thomas Schneider	164,933	5.250%	5.750%	151,364	13,569	16,648
James Dowd	89,757	2.625%	3.125%	69,804	19,953	4,076
Lloyd Stemple	183,530	2.750%	3.250%	148,063	35,467	9,168
Daniel Phillips	63,772	3.625%	4.125%	60,435	3,337	4,509

Other than the loans noted in the above table, all other loans made to directors or executive officers:

- · 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 the Company; and
- did not involve more than normal risk of collectability or present other unfavorable features.

All transactions between us and our executive officers, directors, holders of 10% or more of the shares of the Company's common stock and affiliates thereof, must be approved by a majority of our independent outside directors not having any interest in the transaction, pursuant to our Code of Ethics.

Director Independence

Our common stock is listed on the NASDAQ Capital Market. The Board of Directors has determined that all of its directors, with the exception of Mr. Schneider, are "independent" pursuant to NASDAQ's listing requirements. In evaluating the independence of our independent directors, we considered the following transactions between us and our independent directors during 2019 that are not required to be disclosed under "Transactions with Certain Related Persons:"

- · We paid \$13,025 for parking in a garage in downtown Syracuse for our Pike Block Branch owned by Director John Funiciello; and
- The law firm of which our Director William A. Barclay is a partner, was paid for real estate loan closings by borrowers and other legal matters in the amount of \$8,254. We also paid the firm \$3,126 for closing services not paid by borrowers.

Our Board of Directors has determined that these transactions did not impair the independence of the named directors. Our independent directors hold executive sessions no less than twice a year.

ANNEX B

CONSOLIDATED FINANCIAL STATEMENTS OF PATHFINDER BANCORP, INC.

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Pathfinder Bancorp, Inc. Consolidated Statements of Condition (Unaudited)

(In thousands, except share and per share data)		December 31, 2019		
ASSETS:				
Cash and due from banks (including restricted balances of \$1,600 and \$0, respectively)	\$ 19,320	\$	8,284	
Interest-earning deposits (including restricted balances of \$0 and \$0, respectively)	25,803		11,876	
Total cash and cash equivalents	45,123	_	20,160	
Available-for-sale securities, at fair value	116,131		111,134	
Held-to-maturity securities, at amortized cost (fair value of \$143,140 and \$124,148, respectively)	141,298		122,988	
Marketable equity securities, at fair value	1,564		534	
Federal Home Loan Bank stock, at cost	4,091		4,834	
Loans	806,009		745,516	
Loans held-for-sale (1)	_		35,935	
Less: Allowance for loan losses	10,553		8,669	
Loans receivable, net	795,456		772,782	
Premises and equipment, net	22,311		22,699	
Operating lease right-of-use assets	2,312		2,386	
Accrued interest receivable	4,973		3,712	
Foreclosed real estate	26		88	
Intangible assets, net	141		149	
Goodwill	4,536		4,536	
Bank owned life insurance	17,625		17,403	
Other assets	11,437		10,402	
Total assets	\$ 1,167,024	\$	1,093,807	
LIABILITIES AND SHAREHOLDERS' EQUITY: Deposits: Interest-bearing Noninterest-bearing	\$ 810,455 160,138	\$	774,392 107,501	
Total deposits	970,593		881,893	
Short-term borrowings	10,158		25,138	
Long-term borrowings	65,239		67,987	
Subordinated loans	15,145		15,128	
Accrued interest payable	276		396	
Operating lease liabilities	2,587		2,650	
Other liabilities	10,419		9,946	
Total liabilities	1,074,417		1,003,138	
Shareholders' equity: Preferred stock, par value \$0.01 per share; no liquidation preference; 10,000,000 and 10,000,000 shares authorized, respectively; 1,155,283 and		_		
1,155,283 shares issued and outstanding, respectively	12		12	
Common stock, par value \$0.01; 25,000,000 authorized shares; 4,753,883 and 4,709,238 shares issued and outstanding, respectively	48		47	
Additional paid in capital	49,747		49,362	
Retained earnings	47,660		44,839	
Accumulated other comprehensive loss	(4,387)		(2,971)	
Unearned ESOP	(765)		(855)	
Total Pathfinder Bancorp, Inc. shareholders' equity	92,315		90,434	
Noncontrolling interest	292		235	
Total equity	92,607		90,669	
Total liabilities and shareholders' equity	\$ 1,167,024	\$	1,093,807	

⁽¹⁾ Based on ASC 948, Mortgage Banking, loans shall be classified as held-for-sale once a decision has been made to sell the loans and shall be transferred to the held-for-sale category at lower of cost or fair value. At December 31, 2019, the loans under contract to be sold had a principal balance of \$35.8 million and net deferred fees of \$146,000. These loans were transferred at their amortized cost of \$35.9 million as of December 31, 2019, as the fair value of these loans was greater than the amortized cost.

Pathfinder Bancorp, Inc. Consolidated Statements of Income (Unaudited)

	For th months	e three s ended,	For the six months ended		
(In thousands, except per share data)	June 30,	June 30,	June 30,	June 30,	
Interest and dividend income:	2020	2019	2020	2019	
Loans, including fees	\$ 8,832	\$ 8,222	\$18,074	\$15,797	
Debt securities:	\$ 0,002	Ψ 0,222	Ψ10,07.	Ψ15,757	
Taxable	1,549	1,655	3,241	3,454	
Tax-exempt	52	51	59	159	
Dividends	64	74	134	151	
Federal funds sold and interest earning deposits	17	106	49	216	
Total interest and dividend income	10,514	10,108	21,557	19,777	
Interest expense:					
Interest on deposits	2,204	2,740	4,760	5,085	
Interest on short-term borrowings	39 439	58 387	96 884	225 780	
Interest on long-term borrowings Interest on subordinated loans	192	217	398	434	
Total interest expense	2,874	3,402	6,138	6,524	
Net interest income	7,640	6,706	15,419	13,253	
Net interest income Provision for loan losses	1,146	610	2,213	754	
Net interest income after provision for loan losses	6,494	6,096	13,206	12,499	
·	0,434	0,090	13,200	12,433	
Noninterest income: Service charges on deposit accounts	303	348	659	630	
Service charges on deposit accounts	106	101	222	222	
Loan servicing fees	79	60	128	87	
Net gains on sales and redemptions of investment securities	1,023	32	1,049	111	
(Losses) gains on marketable equity securities	(722)	16	(916)	57	
Net gains on sales of loans and foreclosed real estate	97	13	769	5	
Debit card interchange fees	205	187	368	331	
Insurance agency revenue	185	218	522	461	
Other charges, commissions & fees	255	244	478	408	
Total noninterest income	<u>1,531</u>	1,219	3,279	2,312	
Noninterest expense:	2,972	3,454	6,219	7,104	
Salaries and employee benefits Building and occupancy	2,972 707	632	1,461	1,287	
Data processing	552	587	1,152	1,162	
Professional and other services	301	380	617	716	
Advertising	261	242	437	481	
FDIC assessments	150	130	339	241	
Audits and exams	125	100	250	200	
Insurance agency expense	212	229	404	428	
Community service activities	12 5	144	119	282	
Foreclosed real estate expenses Other expenses	461	59 582	35 970	296 1,053	
•	5,758	6,539	12,003	13,250	
Total noninterest expense Income before income taxes	2,267	776	4,482	1,561	
Income before income taxes Provision for income taxes	439	175	4,462 894	426	
	1,828	601	3,588	1,135	
Net income attributable to noncontrolling interest and Pathfinder Bancorp, Inc.	(13)		<u>3,366</u>	1,135	
Net (loss) income attributable to noncontrolling interest		(6) \$ 607			
Net income attributable to Pathfinder Bancorp Inc.	4 - 1,0 - 1 -		\$ 3,531	<u>\$ 1,121</u>	
Convertible preferred stock dividends	69	69	138	69	
Warrant dividends	7	8	15	8	
Undistributed earnings allocated to participating securities	322	38 c 402	612	<u>41</u>	
Net income available to common shareholders	\$ 1,443	\$ 492	\$ 2,766	\$ 1,003	
Earnings per common share – basic	\$ 0.31	\$ 0.11	\$ 0.60	\$ 0.23	
Earnings per common share – diluted	\$ 0.31	\$ 0.11	\$ 0.60	\$ 0.23	
Dividends per common share	\$ 0.06	\$ 0.06	\$ 0.12	\$ 0.12	
	- 0.00	- 0.00	<u> </u>	-	

Pathfinder Bancorp, Inc. Consolidated Statements of Comprehensive Income (Unaudited)

	For the months		For the months	
(In thousands)	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Net Income	\$1,828	\$ 601	\$ 3,588	\$1,135
Other Comprehensive Income (Loss)				
Retirement Plans:				
Retirement plan net losses recognized in plan expenses	59	84	117	168
<u>Unrealized holding gains (losses) on available-for-sale securities:</u>				
Unrealized holding (losses) gains arising during the period	4,393	1,759	760	3,748
Reclassification adjustment for net gains included in net income	(873)	(32)	(899)	(111)
Net unrealized gains (losses) on available-for-sale securities	3,520	1,727	(139)	3,637
Derivatives and hedging activities:				
Unrealized holding losses arising during the period	(184)		(1,528)	
Net unrealized losses on derivatives and hedging activities	(184)	_	(1,528)	_
Accretion of net unrealized loss on securities transferred to held-to- maturity (1)	10	9	19	15
Other comprehensive income (loss), before tax	3,405	1,820	(1,531)	3,820
Tax effect	(715)	(382)	321	(802)
Other comprehensive income (loss) , net of tax	2,690	1,438	(1,210)	3,018
Comprehensive income	\$4,518	\$2,039	\$ 2,378	\$4,153
Comprehensive (loss) income, attributable to noncontrolling interest	\$ (13)	\$ (6)	\$ 57	\$ 14
Comprehensive income attributable to Pathfinder Bancorp, Inc.	\$4,531	\$2,045	\$ 2,321	\$4,139
Tax Effect Allocated to Each Component of Other Comprehensive Income (Loss)				
Retirement plan net losses recognized in plan expenses	\$ (12)	\$ (18)	\$ (24)	\$ (37)
Unrealized holding gains (losses) on available-for-sale securities arising during the period	(923)	(369)	(160)	(785)
Reclassification adjustment for net gains included in net income	183	7	189	23
Unrealized losses on derivatives and hedging arising during the period	39		321	
Accretion of net unrealized loss on securities transferred to held-to- maturity (1)	(2)	(2)	(5)	(3)
Income tax effect related to other comprehensive income (loss)	\$ (715)	\$ (382)	\$ 321	\$ (802)

⁽¹⁾ The accretion of the unrealized holding losses in accumulated other comprehensive loss at the date of transfer at September 30, 2013 partially offsets the amortization of the difference between the par value and the fair value of the investment securities at the date of transfer, and is an adjustment of yield.

Pathfinder Bancorp, Inc. Consolidated Statements of Changes in Shareholders' Equity Three months ended June 30, 2020 and June 30, 2019 (Unaudited)

(In thousands, except share and per share data)	Preferred Stock	Common Stock	Additional Paid in Capital	Retained Earnings	Accumulated Other Com- prehensive Loss	Unearned ESOP	Non- controlling Interest	Total
Balance, March 31, 2020	\$ 12	\$ 47	\$ 49,659	\$46,174	\$ (7,077)	\$ (809)	\$ 305	\$88,311
Net income	_	_	_	1,841		_	(13)	1,828
Other comprehensive income, net of tax	_	_	_	_	2,690	_	_	2,690
ESOP shares earned (6,110 shares)	_	_	15	_		44	_	59
Restricted stock units (13,437 shares)	_	_	_	_	_	_	_	_
Stock based compensation	_	_	73	_		_	_	73
Stock options exercised	_	1	_	_	_	_	_	1
Common stock dividends declared (\$0.06 per share)	_	_	_	(279)	_	_	_	(279)
Preferred stock dividends declared (\$0.06 per share)	_	_	_	(69)	_	_	_	(69)
Warrant dividends declared (\$0.06 per share)	_	_	_	(7)		_	_	(7)
Balance, June 30, 2020	\$ 12	\$ 48	\$ 49,747	\$47,660	\$ (4,387)	\$ (765)	\$ 292	\$92,607
Balance, March 31, 2019	\$ —	\$ 44	\$ 29,454	\$42,133	\$ (4,462)	\$ (989)	\$ 258	\$66,438
Net income	_	_	_	607			(6)	601
Other comprehensive income, net of tax	_	_	_	_	1,438	_	_	1,438
Proceeds of common stock private placement, net of								
expenses (1)	_	3	3,823	_	_	_	_	3,826
Proceeds of preferred stock private placement, net of								
expenses (1)	12	_	15,358	_	_	_	_	15,370
Effect of warrant issued from private placement (1)	_	_	373	_	_	_		373
ESOP shares earned (6,110 shares)	_	_	44	_	_	45	_	89
Restricted stock units (13,436 shares)	_	_	_	_	_	_	_	_
Stock based compensation	_	_	73	_	_	_	_	73
Common stock dividends declared (\$0.06 per share)	_	_	_	(274)	_	_	_	(274)
Preferred stock dividends declared (\$0.06 per share)	_	_	_	(69)	_	_	_	(69)
Warrant dividends declared (\$0.06 per share)	_	_	_	(8)	_	_	_	(8)
Distributions from affiliates	_	_	_		_		(13)	(13)
Balance, June 30, 2019	\$ 12	\$ 47	\$ 49,125	\$42,389	\$ (3,024)	\$ (944)	\$ 239	\$87,844

(1) On May 8, 2019, the Company entered into a Securities Purchase Agreement with an institutional investor, in which it sold: (i) 37,700 shares of the Company's common stock, (ii) 1,155,283 shares of a new series of preferred stock, Series B convertible perpetual preferred stock; and (iii) a warrant to purchase 125,000 shares of common stock in a private placement transaction. The Company also entered into Subscription Agreements with certain directors and executive officers of the Company as well as other accredited investors. Pursuant to the Subscription Agreements, the investors purchased an aggregate of 269,277 shares of common stock.

Pathfinder Bancorp, Inc. Consolidated Statements of Changes in Shareholders' Equity Six months ended June 30, 2020 and June 30, 2019 (Unaudited)

(In thousands, except share and per share data)	Preferre Stock	d	Common Stock	Additional Paid in Capital	Retained Earnings	Oth pre	umulated er Com- hensive Loss		earned SOP	cont	on- rolling erest	Total
Balance, January 1, 2020		2	\$ 47	\$ 49,362	\$ 44,839	\$	(2,971)	\$	(855)	\$	235	\$90,669
Net income	Ψ I	_	Ψ/	Ψ 43,502	3,531	Ψ	(2,371)	Ψ	(000)	Ψ	57	3,588
Reevaluation of deferred tax asset valuation allowance (1)	_		_	_			(206)		_		_	(206)
Other comprehensive loss, net of tax	_		_	_	_		(1,210)		_		_	(1,210)
ESOP shares earned (12,221 shares)	_		_	52	_		(-,)		90		_	142
Restricted stock units (13,437 shares)	_		_	_	_		_		_		_	_
Stock based compensation	_		_	139	_		_		_		_	139
Stock options exercised	_		1	194	_		_		_		_	195
Common stock dividends declared (\$0.12 per share)	_		_	_	(557)		_		_		_	(557)
Preferred stock dividends declared (\$0.12 per share)	_		_	_	(138)		_		_		_	(138)
Warrant dividends declared (\$0.12 per share)	_		_	_	(15)		_		_			(15)
Balance, June 30, 2020	\$ 1	2	\$ 48	\$ 49,747	\$ 47,660	\$	(4,387)	\$	(765)	\$	292	\$92,607
Balance, January 1, 2019	\$ —		\$ 44	\$ 29,139	\$ 42,114	\$	(6,042)	\$ ((1,034)	\$	238	\$64,459
Net income			_		1,121			•	_		14	1,135
Other comprehensive income, net of tax	_		_	_	_		3,018		_		_	3,018
Proceeds of common stock private placement, net of expenses (2)	_		3	3,823	_		_		_		_	3,826
Proceeds of preferred stock private placement, net of expenses (2)	1	2	_	15,358	_		_		_		_	15,370
Effect of warrant issued from private placement (2)	_	-	_	373	_		_		_		_	373
ESOP shares earned (12,221 shares)	_		_	86	_		_		90		_	176
Restricted stock units (13,436 shares)	_	-	_				_		_		_	_
Stock based compensation	_		_	146	_		_		_		_	146
Stock options exercised	_	-	_	200	_		_		_		_	200
Cumulative effect of change in measurement of operating leases (3)	_		_	_	(239)		_		_		_	(239)
Common stock dividends declared (\$0.12 per share)	_	-	_	_	(530)		_		_		_	(530)
Preferred stock dividends declared (\$0.06 per share)			_	_	(69)		_		_		_	(69)
Warrant dividends declared (\$0.06 per share)	_	-	_	_	(8)		_		_		_	(8)
Distributions from affiliates											(13)	(13)
Balance, June 30, 2019	\$ 1	2	\$ 47	\$ 49,125	\$ 42,389	\$	(3,024)	\$	(944)	\$	239	\$87,844

Management determined that the Company, under the current New York State ("NYS") tax code, was highly unlikely to incur a material NYS tax liability in the foreseeable future. As a result, certain net current and deferred tax assets, related to GAAP vs. tax timing differences under previous NYS tax law were no longer going to provide any future tax benefit. The substantial majority of these net deferred tax assets were offset by a related valuation allowance established in prior periods. Therefore, the Company eliminated its remaining NYS net deferred tax asset balances and the related valuation allowance on January 1, 2020. The effect of these eliminations required an adjustment to other comprehensive income balances and had no effect on 2020 reported earnings.

On May 8, 2019, the Company entered into a Securities Purchase Agreement with an institutional investor, in which it sold: (i) 37,700 shares of the Company's common stock, (ii) 1,155,283 shares of a new series of preferred stock. Series B convertible perpetual preferred stock; and (iii) a warrant to purchase 125,000 shares of common stock in a private (1)

1,155,283 shares of a new series of preferred stock, Series B convertible perpetual preferred stock; and (iii) a warrant to purchase 125,000 shares of common stock in a private placement transaction. The Company also entered into Subscription Agreements with certain directors and executive officers of the Company as well as other accredited investors. Pursuant to the Subscription Agreements, the investors purchased an aggregate of 269,277 shares of common stock.

Cumulative effect of the adoption of ASU 2016-02, Leases (Topic 842), based on the difference in the right-of-use asset and lease liability as of January 1, 2019.

Pathfinder Bancorp, Inc. Consolidated Statements of Cash Flows (Unaudited)

PREMITY A CITY TITY CITY CI		For the si ended J	
set income attributable to Pathfinder Bancop, inc. (adjustments to record) in the income to test diffuser from operating activities: Provision for loan losses 21,13	(In thousands)	2020	2019
Wilstamment to reconcile net income to net cash flows from operating scivities: 2,213 1,75 Provision for non bioses: 40,289 4 Amonization of specimal gioses: 40,289 4 Comparison of specimal gioses: 4 4 Related loases (gian) on sales, redemptions and calls of: 4 4 Real seatz equived through foreclosure 4 4 Available-for-sale investment securities (1,014) (11 Held-or-matry investment securities 616 5 Marketable equity securities 616 6 Appreciation of organization organization of organization o	OPERATING ACTIVITIES		
Provision for loss losses 2,13 3,15		\$ 3,531	\$ 1,121
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RESTRICTED CÁSH		58	503
Collateral deposits for hedge position included in cash and due from banks 1,600 —	RESTRICTED CASH		
	Collateral deposits for hedge position included in cash and due from banks	1,600	_

Notes to Consolidated Financial Statements (Unaudited)

Note 1: Basis of Presentation

The accompanying unaudited consolidated financial statements of Pathfinder Bancorp, Inc., (the "Company"), Pathfinder Bank (the "Bank") and its other wholly owned subsidiaries have been prepared in accordance with accounting principles generally accepted in the United States of America for interim financial information, the instructions for Form 10-Q and Article 8 of Regulation S-X. Accordingly, they do not include all of the information and footnotes necessary for a complete presentation of consolidated financial condition, results of operations and cash flows in conformity with generally accepted accounting principles. In the opinion of management, all adjustments, consisting of normal recurring accruals considered necessary for a fair presentation, have been included. Certain amounts in the 2019 consolidated financial statements may have been reclassified to conform to the current period presentation. These reclassifications had no effect on net income or comprehensive income as previously reported. Operating results for the three and six months ended June 30, 2020 are not necessarily indicative of the results that may be expected for the full year ending December 31, 2020 or any other interim period.

The Company's consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States and follow practices within the banking industry. Application of these principles requires management to make estimates, assumptions, and judgments that affect the amounts reported in the consolidated financial statements and accompanying notes. These estimates, assumptions, and judgments are based on information available as of the date of the financial statements; accordingly, as this information changes, the financial statements could reflect different estimates, assumptions, and judgments. Certain accounting policies inherently have a greater reliance on the use of estimates, assumptions, and judgments and as such have a greater possibility of producing results that could be materially different than originally reported. Estimates, assumptions, and judgments are necessary when assets and liabilities are required to be recorded at fair value or when an asset or liability needs to be recorded contingent upon a future event. Carrying assets and liabilities at fair value inherently results in more financial statement volatility. The fair values and information used to record valuation adjustments for certain assets and liabilities are based on quoted market prices or are provided by unaffiliated third-party sources, when available. When third party information is not available, valuation adjustments are estimated in good faith by management.

Although the Company owns, through its subsidiary Pathfinder Risk Management Company, Inc., 51% of the membership interest in FitzGibbons Agency, LLC ("Agency"), the Company is required to consolidate 100% of the Agency within the consolidated financial statements. The 49% of which the Company does not own is accounted for separately as noncontrolling interests within the consolidated financial statements.

Note 2: New Accounting Pronouncements

The Financial Accounting Standards Board ("FASB") and, to a lesser extent, other authoritative rulemaking bodies promulgate generally accepted accounting principles ("GAAP") to regulate the standards of accounting in the United States. From time to time, the FASB issues new GAAP standards, known as Accounting Standards Updates ("ASUs") some of which, upon adoption, may have the potential to change the way in which the Company recognizes or reports within its consolidated financial statements. The following table provides a description of the accounting standards that are not currently effective, but could have an impact on the Company's consolidated financial statements upon adoption.

Standards Not Yet Adopted as of June 30, 2020

Standard

Measurement of Credit Losses on Financial Instruments (ASU 2016-13: Financial Instruments – Credit Losses [Topic 326]: Measurement of Credit Losses on Financial Instruments)

Description

The amended guidance replaces the current incurred loss model for determining the allowance for credit losses. The guidance requires financial assets measured at amortized cost to be presented at the net amount expected to be collected. The allowance for credit losses will represent a valuation account that is deducted from the amortized cost basis of the financial assets to present their net carrying value at the amount expected to be collected. The income statement will reflect the measurement of credit losses for newly recognized financial assets as well as expected increases or decreases of expected credit losses that have taken place during the period. When determining the allowance, expected credit losses over the contractual term of the financial asset(s) (taking into account prepayments) will be estimated considering relevant information about past events, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. The amended guidance also requires recording an allowance for credit losses for purchased financial assets with a more-than-insignificant amount of credit deterioration since origination. The initial allowance for these assets will be added to the purchase price at acquisition rather than being reported as an expense. Subsequent changes in the allowance will be recorded through the income statement as an expense adjustment. In addition, the amended guidance credit losses relating available-for-sale debt securities to be recorded

Required Date of Implementation

January 1, 2023 (early adoption permitted as of January 1, 2019)

Effect on Consolidated Financial Statements

The Company is assessing the new guidance to determine what modifications to existing credit estimation processes may be required. The new guidance is complex and management is still evaluating the preliminary output from models that have been developed during this evaluative phase. In addition, future levels of allowances will also reflect new requirements to include estimated credit losses on investment securities classified as held-to-maturity, if any. The Company formed an Implementation Committee, whose membership includes representatives of senior management, to develop plans that will encompass: (1) internal methodology changes (2) data collection and management activities, (3) internal communication requirements, and (4) estimation of the projected impact of this guidance. It has been generally assumed that the conversion from the incurred loss model, required under current GAAP, to the current expected credit loss (CECL) (as required methodology implementation of this Update) will, more likely than not, result in increases to the allowances for credit losses at many financial institutions. However, the amount of any change in the allowance for credit losses resulting from the new guidance will ultimately be impacted by the provisions of this guidance as well as by the loan and debt security portfolios composition and asset quality at the adoption date, and economic conditions and forecasts at the

Standard

Description

through an allowance for credit losses. The calculation of credit losses for available-for-sale securities will be similar to how it is determined under existing guidance.

Required Date of Implementation

Effect on Consolidated Financial Statements

time of adoption. The amendments in this Update should be applied on a modified retrospective basis by means of a cumulative-effect adjustment to the opening retained earnings balance in the statement of financial position as of the date that an entity adopted the amendments in Update 2016-13. The cumulative impact of the economic effects of the COVID-19 pandemic on the changes to the allowance for loan losses, that will be required upon the implementation of the **CECL** methodology, can not be estimated at this time.

Transition Relief for the Implementation of ASU-2016-13 (ASU 2019-5: Financial Instruments – Credit Losses [Topic 326]: Targeted Transition Relief)

The amendments in this ASU provide entities that have certain instruments within the scope of Subtopic 326-20, Financial Instruments – Credit Losses - Measured at Amortized Cost, with an option to irrevocably elect the fair value option in Subtopic 825-10, Financial Instruments -Overall, applied on an instrument-by-instrument basis for eligible instruments, upon adoption of Topic 326. The fair value option election does not apply to held-to-maturity debt securities. An entity that elects the fair value option should subsequently apply the guidance in Subtopics 820-10, Fair Value Measurement - Overall, and 825-10. General guidance for the use of the fair value option is contained in Subtopic 825-10. The irrevocable election of the fair value option must be applied on an instrument-by-instrument basis for eligible instruments, whose characteristics are within the scope of Subtopic 326-20. Upon adoption of Topic 326, for items measured at fair value in accordance with paragraph 326-10-65-1(i), the

See comments above related to ASU 2016-13.

See comments above related to ASU 2016-13.

Description

difference between the carrying amount and the fair value shall be recorded by means of a cumulative- effect adjustment to the opening retained earnings balance as of the beginning of the first reporting period that an entity has adopted ASU 2016-13. Those differences may include, but are not limited to: (1) unamortized deferred costs, fees, premiums, and discounts (2) valuation allowances (for example, allowance for loan losses), or (3) accrued interest.

Required Date of Effect on Consolidated Financial Implementation Statements

Compensation (ASU 2018-14: Compensation – Retirement Benefits – Defined Benefit Plans – General [Subtopic 715 – 20]: Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans)

The FASB is issuing the amendments in this ASU as part of the disclosure framework project. The amendments in this ASU modify the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans.

The following disclosure requirements are removed from Subtopic 715-20:

- 1. The amounts in accumulated other comprehensive income expected to be recognized as components of net periodic benefit cost over the next fiscal year.
- 2. The amount and timing of plan assets expected to be returned to the employer.
- 3. Related party disclosures about the amount of future annual benefits covered by insurance and annuity contracts and significant transactions between the employer or related parties and the plan.
- 4. The effects of a one-percentage-point change in assumed health care cost trend rates on the (a) aggregate of the service and interest cost components of net periodic benefit costs and (b) benefit obligation for postretirement health care benefits.

The amendments in this ASU are effective for fiscal years ending after December 15, 2020, for public business entities and for fiscal years ending after December 15, 2021, for all other entities. Early adoption is permitted for all entities.

The Company does not expect the new guidance will have a material impact to its consolidated statements of condition or income.

Description

The following disclosure requirements are added to Subtopic 715-20:

- 1. The weighted-average interest crediting rates for cash balance plans and other plans with promised interest crediting rates.
- 2. An explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period.

The amendments in this ASU also clarify the disclosure requirements in paragraph 715-20-50-3, which state that the following information for defined benefit pension plans should be disclosed:

- 1. The projected benefit obligation (PBO) and fair value of plan assets for plans with PBOs in excess of plan assets.
- 2. The accumulated benefit obligation (ABO) and fair value of plan assets for plans with ABOs in excess of plan assets.

Investments (ASU 2020-01-Equity
Securities [Topic 321],
Investments – Equity Method
and Joint Ventures
[Topic 323], and Derivatives
and Hedging [Topic 815] –
Clarifying the
Interactions between
Topic 321, Topic 323, and

Topic 815)

The amendments in this Update clarify the interaction of the accounting for equity securities under Topic 321 and investments accounted for under the equity method of accounting in Topic 323 and the accounting for certain forward contracts and purchased options accounted for under Topic 815. amendments clarify that an entity should consider observable transactions that require it to either apply or discontinue the equity method of accounting for the purposes of applying the measurement alternative in accordance with Topic 321 immediately before applying or upon discontinuing the equity method. The amendments clarify that for the purpose of applying paragraph 815-10-15-141(a) an entity should not consider whether, upon the settlement of the forward contract or

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The amendments in this ASU are effective for fiscal years ending after December 15, 2020, for public business entities and for fiscal years ending after December 15, 2021, for all other entities. Early adoption is permitted for all entities.

The amendments in this Update should be applied prospectively. The Company does not expect the new guidance will have a material impact to its consolidated statements of condition or income.

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exercise of the purchased option, individually or with existing investments, the underlying securities would be accounted for under the equity method in Topic 323 or the fair value option in accordance with the financial instruments guidance in Topic 825. An entity also would evaluate the remaining characteristics in paragraph 815-10-15-141 to determine the accounting for those forward contracts and purchased options.

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Income Taxes (ASU 2019-12- Simplifying the Accounting for Income Taxes)

The FASB Board is issuing this Update as part of its initiative to reduce complexity in accounting standards (the Simplification Initiative).

The amendments in this Update simplify the accounting for income taxes by removing the following exceptions, among others not considered to be applicable to the Company:

- 1. Exception to the incremental approach for intraperiod tax allocation when there is a loss from continuing operations and income or a gain from other items (for example, discontinued operations or other comprehensive income)
- 2. Exception to the general methodology for calculating income taxes in an interim period when a year-to-date loss exceeds the anticipated loss for the year.

The amendments in this Update also simplify the accounting for income taxes by doing the following:

1. Requiring that an entity recognize a franchise tax (or similar tax) that is partially based on income as an income-based tax and account for any incremental amount incurred as a non-income-based tax.

The amendments in this ASU are effective for fiscal years ending after December 15, 2020, for public business entities and for fiscal years ending December 15, 2021, for all other entities. Early of adoption the amendments permitted. including adoption in any interim period for (1) public business entities for periods for which financial statements have not yet been issued and (2) all other entities for periods for financial statements have not vet been made

The amendments in this Update related to separate financial statements of legal entities that are not subject to tax should be applied on a retrospective basis for all periods presented. The amendments related to changes in ownership of foreign equity method investments or foreign subsidiaries should be applied on a modified retrospective basis through a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year of adoption. The amendments related to franchise taxes that are partially based on income should be applied on either a retrospective basis for all periods presented or a modified retrospective basis through a cumulativeeffect adjustment to retained earnings as of the beginning of the fiscal year of adoption. All other amendments should be applied on a prospective basis. The Company does not expect the new guidance will have a material impact to its consolidated statements of condition or income.

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- 2. Requiring that an entity evaluate when a step up in the tax basis of goodwill should be considered part of the business combination in which the book goodwill was originally recognized and when it should be considered a separate transaction.
- 3. Specifying that an entity is not required to allocate the consolidated amount of current and deferred tax expense to a legal entity that is not subject to tax in its separate financial statements. However, an entity may elect to do so (on an entity-by-entity basis) for a legal entity that is both not subject to tax and disregarded by the taxing authority.
- 4. Requiring that an entity reflect the effect of an enacted change in tax laws or rates in the annual effective tax rate computation in the interim period that includes the enactment date.
- 5. Making minor Codification improvements for income taxes related to employee stock ownership plans and investments in qualified affordable housing projects accounted for using the equity method.

Financial Instruments – Credit Losses (ASU 2019-11- Codification Improvements to Topic 326) On June 16, 2016, the FASB issued Accounting Standards Update No. 2016-13, *Financial Instruments – Credit Losses (Topic 326)*: Measurement of Credit Losses on Financial Instruments, which introduced an expected credit loss model for the impairment of financial assets measured at amortized cost basis. That model replaces the probable, incurred loss model for those assets. Through the amendments in that Update, the Board added Topic 326, *Financial Instruments – Credit Losses*, and made several consequential amendments to the

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available for issuance. An entity that elects to early adopt amendments in interim period should reflect any adjustments as of the beginning of the annual period that includes that interim period. Additionally, an entity that elects early adoption must adopt all the amendments in the same period.

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January 1, 2023 (early adoption permitted as of January 1, 2019). The effective dates and transition requirements for the amendments are the same as the effective dates and transition requirements in Update 2016-13.

The Company is assessing the new guidance to determine modifications to existing credit estimation processes may be required. The new guidance is complex management is still evaluating preliminary output from models that have been developed during this evaluative phase. In addition, future levels of allowances will also reflect new requirements to include estimated credit losses on investment securities classified as held-to-maturity, if any. The Company has formed Implementation an Committee.

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Codification. The Board has an ongoing project on its agenda for improving the Codification or correcting its unintended application. The items addressed in that project generally are not expected to have a significant effect on current accounting practice or create a significant administrative cost for most entities. The amendments in this Update are similar to those items. However, the Board decided to issue a separate Update for improvements to the amendments in Update 2016-13 to increase stakeholder awareness of those amendments and to expedite the improvement process. The amendments include items brought to the Board's attention by stakeholders.

The amendments in this Update clarify or address stakeholders' specific issues about certain aspects of the amendments in Update 2016-13 as described below:

1. Expected Recoveries for Purchased Financial Assets with Credit Deterioration (PCDs): The amendments clarify that the allowance for credit losses for PCD assets should include in the allowance for credit losses expected recoveries of amounts previously written off and expected to be written off by the entity and should not exceed the aggregate of amounts of the amortized cost basis previously written off and expected to be written off by an entity. In addition, the amendments clarify that when a method other than a discounted cash flow method is used to estimate expected credit losses, expected recoveries should not include any amounts that result in an acceleration of the noncredit discount. An entity may include

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whose membership includes representatives of senior management, to develop plans that will encompass: internal methodology changes (2) data collection and management activities, (3) internal communication requirements, and (4) estimation of the projected impact of this guidance. It has been generally assumed that the conversion from the incurred loss model, required under current GAAP, to the CECL methodology will, more likely than not, result in increases to the allowances for credit losses at many financial institutions. However, the amount of any change in the allowance for credit losses resulting from the new guidance will ultimately be impacted by the provisions of this guidance as well as by the loan and debt security portfolios composition and asset quality at the adoption date, and economic conditions and forecasts at the time of adoption. The amendments in this Update should be applied on a modified retrospective basis by means of a cumulative-effect adjustment to the opening retained earnings balance in the statement of financial position as of the date that an entity adopted the amendments in Update 2016-13.

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increases in expected cash flows after acquisition.

- 2. Transition Relief for Troubled Debt Restructurings (TDRs): The amendments provide transition relief by permitting entities an accounting policy election to adjust the effective interest rate on existing TDRs using prepayment assumptions on the date of adoption of Topic 326 rather than the prepayment assumptions in effect immediately before the restructuring.
- 3. Disclosures Related to Accrued Interest Receivables: The amendments extend the disclosure relief for accrued interest receivable balances to additional relevant disclosures involving amortized cost basis.
- 4. Financial Assets Secured by Collateral Maintenance Provisions: The amendments clarify that an entity should assess whether it reasonably expects the borrower will be able to continually replenish collateral securing the financial asset to apply the practical expedient. The amendments clarify that an entity applying the practical expedient should estimate expected credit losses for any difference between the amount of the amortized cost basis that is greater than the fair value of the collateral securing the financial asset (that is, the unsecured portion of the amortized cost basis). An entity may determine that the expectation of nonpayment for the amount of the amortized cost basis equal to the fair value of the collateral securing the financial asset is zero.
- 5. Conforming Amendment to Subtopic 805-20: The amendment to Subtopic 805-20, *Business Combinations Identifiable Assets and Liabilities*, *and Any Noncontrolling Interest*, clarifies

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the guidance by removing the cross-reference to Subtopic 310-30 in paragraph 805-20-50-1 and replacing it with a cross-reference to the guidance on PCD assets in Subtopic 326-20.

Reference Rate Reform (ASU 2020-04- Facilitation of the Effects of Reference Rate Reform on Financial Reporting) The amendments provide optional expedients and exceptions for applying generally accepted accounting principles (GAAP) to contracts, hedging relationships, and other transactions affected by reference rate reform. The amendments apply only to contracts, hedging relationships, and other transactions reference LIBOR or another reference rate expected to be discontinued because of reference rate reform. The amendments (1) apply to contract modifications that replace a reference rate affected by reference rate reform, (2) provide exceptions to existing guidance related to changes to the critical terms of a hedging relationship due to reference rate reform (3) provide optional expedients for fair value hedging relationships, cash flow hedging relationships, and net investment hedging relationships, and (4) provide a onetime election to sell, transfer, or both sell and transfer debt securities classified as held to maturity that reference a rate affected by reference rate reform and that are classified as held to maturity before January 1, 2020.

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The amendments in this Update are effective for all entities as of March 12, 2020 through December 31, 2022.

amendments for modifications can be elected to be applied as of any date from the beginning of an interim period that includes or is subsequent to March 12, 2020, or prospectively from a date within an interim period that includes or is subsequent to March 12, 2020. The amendments for existing hedging relationships can be elected to be applied as of the beginning of the interim period that includes March 12, 2020 and to new eligible hedging relationships entered into after the beginning of the interim period that includes March 12, 2020. The Company does not expect that the guidance will have a material effect on its on its consolidated statements of condition or income.

Note 3: Earnings per Common Share

The Company entered into a securities purchase agreement with Castle Creek Capital Partners VII, L.P. on May 8, 2019, pursuant to which the Company sold: (i) 37,700 shares of the Company's common stock, par value \$0.01 per share, at a purchase price of \$14.25 per share; (ii) 1,155,283 shares of a new series of preferred stock, Series B convertible perpetual preferred stock, par value \$0.01 per share, at a purchase price of \$14.25 per share; and (iii) a warrant, with an approximate fair value of \$373,000, to purchase 125,000 shares of common stock of

the Company at an exercise price equal to \$14.25 per share, in a private placement transaction (the "Private Placement") for gross proceeds of approximately \$17.0 million. As a result of the securities purchase agreement, the Company has common stock, preferred stock and a warrant that are all eligible to participate in dividends equal to the common stock dividends on a per share basis. Securities that participate in dividends, such as the Company's preferred stock and warrant, are considered "participating securities." The Company calculates net income available to common shareholders using the two-class method required for capital structures that include participating securities.

In applying the two-class method, basic net income per share was calculated by dividing net income (less any dividends on participating securities) by the weighted average number of shares of common stock and participating securities outstanding for the period. Diluted earnings per share may include the additional effect of other securities, if dilutive, in which case the dilutive effect of such securities is calculated by applying either the two-class method or the Treasury Stock method to the assumed exercise or vesting of potentially dilutive common shares. The method yielding the more dilutive result is ultimately reported for the applicable period. Potentially dilutive common stock equivalents primarily consist of employee stock options and restricted stock units. Unallocated common shares held by the ESOP are not included in the weighted average number of common shares outstanding for purposes of calculating earnings per common share until they are committed to be released to plan participants.

Anti-dilutive shares are common stock equivalents with average exercise prices in excess of the weighted average market price for the period presented. Anti-dilutive stock options, not included in the computation below, were 256,145 for the three months ended June 30, 2020 and 128,073 for the six months ended June 30, 2020 and were -0- for the three and six months ended June 30, 2019.

The following table sets forth the calculation of basic and diluted earnings per share.

		nths ended e 30,		ths ended e 30,	
(In thousands, except per share data)	2020	2019	2020	2019	
Net income attributable to Pathfinder Bancorp, Inc.	\$1,841	\$ 607	\$3,531	\$1,121	
Convertible preferred stock dividends	69	69	138	69	
Warrant dividends	7	8	15	8	
Undistributed earnings allocated to participating securities	322	38	612	41	
Net income available to common shareholders	\$1,443	\$ 492	\$2,766	\$1,003	
Basic weighted average common shares outstanding	4,639	4,443	4,623	4,344	
Effect of assumed exercise of stock options and unvested restricted stock units					
Diluted weighted average common shares outstanding	4,639	4,443	4,623	4,344	
Basic earnings per common share	\$ 0.31	\$ 0.11	\$ 0.60	\$ 0.23	
Diluted earnings per common share	\$ 0.31	\$ 0.11	\$ 0.60	\$ 0.23	

Note 4: Investment Securities

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

		June 30, 2020					
	Amortized	Gross Unrealized	Gross Unrealized	Estimated Fair			
(In thousands)	Cost	Gains	Losses	Value			
Available-for-Sale Portfolio							
Debt investment securities:							
US Treasury, agencies and GSEs	\$ 21,584	\$ 4	\$ (26)	\$ 21,562			
State and political subdivisions	13,167	_	(26)	13,141			
Corporate	11,124	131	(19)	11,236			
Asset backed securities	13,079	1	(279)	12,801			
Residential mortgage-backed – US agency	14,845	279	_	15,124			
Collateralized mortgage obligations – US agency	25,243	166	(528)	24,881			
Collateralized mortgage obligations – Private label	17,316	234	(370)	17,180			
Total	116,358	815	(1,248)	115,925			
Equity investment securities:							
Common stock – financial services industry	206			206			
Total	206			206			
Total available-for-sale	\$116,564	\$ 815	\$ (1,248)	\$116,131			
Held-to-Maturity Portfolio							
Debt investment securities:							
US Treasury, agencies and GSEs	\$ 1,000	\$ 9	\$ —	\$ 1,009			
State and political subdivisions	10,676	418	(19)	11,075			
Corporate	24,776	817	(269)	25,324			
Asset backed securities	22,804	9	(735)	22,078			
Residential mortgage-backed – US agency	11,909	623	_	12,532			
Collateralized mortgage obligations – US agency	23,713	893	(14)	24,592			
Collateralized mortgage obligations – Private label	46,420	183	(73)	46,530			
Total held-to-maturity	\$141,298	\$ 2,952	\$ (1,110)	\$143,140			

		December 31, 2019						
(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value				
Available-for-Sale Portfolio								
Debt investment securities:								
US Treasury, agencies and GSEs	\$ 16,850	\$ —	\$ (30)	\$ 16,820				
State and political subdivisions	1,735	1	_	1,736				
Corporate	12,347	230	(23)	12,554				
Asset backed securities	13,190	61	(19)	13,232				
Residential mortgage-backed – US agency	19,012	56	(88)	18,980				
Collateralized mortgage obligations – US agency	31,320	35	(570)	30,785				
Collateralized mortgage obligations – Private label	16,767	97	(43)	16,821				
Total	111,221	480	(773)	110,928				
Equity investment securities:								
Common stock – financial services industry	206			206				
Total	206	_	_	206				
Total available-for-sale	\$111,427	\$ 480	\$ (773)	\$111,134				
Held-to-Maturity Portfolio								
Debt investment securities:								
US Treasury, agencies and GSEs	\$ 1,998	\$ 2	\$ —	\$ 2,000				
State and political subdivisions	8,534	124	(4)	8,654				
Corporate	25,779	584	(29)	26,334				
Asset backed securities	23,099	101	(115)	23,085				
Residential mortgage-backed – US agency	13,715	247	(3)	13,959				
Collateralized mortgage obligations – US agency	19,607	300	(29)	19,878				
Collateralized mortgage obligations – Private label	30,256	35	(53)	30,238				
Total held-to-maturity	\$122,988	\$ 1,393	\$ (233)	\$124,148				

The amortized cost and estimated fair value of debt investments at June 30, 2020 by contractual maturity are shown below. Expected maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without penalties.

	Available	e-for-Sale	Held-to-	Maturity		
	Amortized	Estimated	Amortized	Estimated		
(In thousands)	Cost	Fair Value	Cost	Fair Value		
Due in one year or less	\$ 15,701	\$ 15,701	\$ 1,976	\$ 1,999		
Due after one year through five years	8,462	8,535	17,572	17,804		
Due after five years through ten years	15,309	15,257	20,392	20,801		
Due after ten years	19,482	19,247	19,316	18,882		
Sub-total	58,954	58,740	59,256	59,486		
Residential mortgage-backed – US agency	14,845	15,124	11,909	12,532		
Collateralized mortgage obligations – US agency	25,243	24,881	23,713	24,592		
Collateralized mortgage obligations – Private label	17,316	17,180	46,420	46,530		
Totals	\$ 116,358	\$ 115,925	\$ 141,298	\$ 143,140		

The Company's investment securities' gross unrealized losses and fair value, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position, are as follows:

	June 30, 2020										
	Less	Twelve Mo	onths	Twe		Ionths or M	1ore	Total			
(Dollars in thousands)	Number of Individual Securities	al Unrealized		Fair Value	Number of Individual Securities		realized Losses	Fair Value	Number of Individual Securities	Unrealized Losses	Fair Value
Available-for-Sale Portfolio											
US Treasury, agencies and GSE's	_	\$	_	\$ —	1	\$	(26)	\$ 4,951	1	\$ (26)	\$ 4,951
State and political subdivisions	4		(26)	11,480	_		_	_	4	(26)	11,480
Corporate	4		(19)	2,505	_		_	_	4	(19)	2,505
Asset backed securities	8		(273)	11,220	1		(6)	262	9	(279)	11,482
Residential mortgage-backed – US agency	_		_	_	_		_	_	_	_	_
Collateralized mortgage obligations – US											
agency	1		(30)	2,085	2		(498)	6,538	3	(528)	8,623
Collateralized mortgage obligations – Private											
label	4		(31)	2,565	4		(339)	2,908	8	(370)	5,473
Totals	21	\$	(379)	\$29,855	8	\$	(869)	\$14,659	29	\$ (1,248)	\$44,514
Held-to-Maturity Portfolio				(<u> </u>				·		·	
State and political subdivisions	3	\$	(19)	\$ 3,368	_	\$	_	\$ —	3	\$ (19)	\$ 3,368
Corporate	9		(269)	9,880	_		_		9	(269)	9,880
Asset backed securities	9		(528)	12,984	2		(207)	3,978	11	(735)	16,962
Residential mortgage-backed – US agency	_		_	_	_		_	_	_	_	
Collateralized mortgage obligations – US											
agency	1		(6)	2,043	1		(8)	1,587	2	(14)	3,630
Collateralized mortgage obligations – Private											
label	4		(72)	5,706	1		(1)	309	5	(73)	6,015
Totals	26	\$	(894)	\$33,981	4	\$	(216)	\$ 5,874	30	\$ (1,110)	\$39,855

	December 31, 2019											
		Twelve Mo	onths		Ionths or N	1ore	Total					
(Dollars in thousands)	Number of Individual Securities		realized osses	Fair Value	Number of Individual Securities		realized Losses	Fair Value	Number of Individual Securities		ealized osses	Fair Value
Available-for-Sale Portfolio												
US Treasury, agencies and GSE's	4	\$	(30)	\$16,820	_	\$	_	\$ —	4	\$	(30)	\$16,820
Corporate	1		(23)	786	_		_	_	1		(23)	786
Asset backed securities	3		(7)	5,211	1		(12)	594	4		(19)	5,805
Residential mortgage-backed – US agency	10		(77)	10,709	4		(11)	2,543	14		(88)	13,252
Collateralized mortgage obligations – US												
agency	10		(67)	15,791	10		(503)	10,034	20		(570)	25,825
Collateralized mortgage obligations – Private												
label	2		(7)	3,818	5		(36)	3,959	7		(43)	7,777
Totals	30	\$	(211)	\$53,135	20	\$	(562)	\$17,130	50	\$	(773)	\$70,265
Held-to-Maturity Portfolio												
State and political subdivisions	1	\$	(4)	\$ 3,027	_	\$	_	\$ —	1	\$	(4)	\$ 3,027
Corporate	2		(29)	2,974	_		_	_	2		(29)	2,974
Asset backed securities	6		(115)	11,091	_		_	_	6		(115)	11,091
Residential mortgage-backed – US agency	_		_	_	1		(3)	198	1		(3)	198
Collateralized mortgage obligations – US												
agency	2		(29)	4,907	_		_	_	2		(29)	4,907
Collateralized mortgage obligations – Private												
label	6		(49)	9,396	2		(4)	1,132	8		(53)	10,528
Totals	17	\$	(226)	\$31,395	3	\$	(7)	\$ 1,330	20	\$	(233)	\$32,725

Excluding the effects of changes in the characteristics of individual debt securities that potentially give rise to other-than-temporary impairment ("OTTI"), as described below, the fair market value of a debt security as of a particular measurement date is highly dependent upon prevailing market and economic environmental factors at the measurement date relative to the prevailing market and economic environmental factors present at the time the debt security was acquired. The most significant market and environmental factors include, but are not limited to (1) the general level of interest rates, (2) the relationship between shorter-term interest rates and longer-term interest rates (referred to as the "slope" of the interest rate yield curve), (3) general bond market liquidity, (4) the recent and expected near-term volume of new issuances of similar debt securities, and (5) changes in the market values of individual loan collateral underlying mortgage-backed debt securities. Changes in interest rates affect the fair market values of debt securities by influencing the discount rate applied to the securities' future expected cash flows. The higher the discount rate, the lower the resultant security price. In addition, the cumulative amount and timing of undiscounted cash flows of debt securities may be also affected by changes in interest rates. For any given level of movement in the general market and economic environmental factors described above, the magnitude of any particular debt security's price changes will also depend heavily upon security-specific factors such as (1) the duration of the security, (2) imbedded optionality contractually granted to the issuer of the security with respect to principal prepayments, and (3) changes in the level of market premiums demanded by investors for securities with imbedded credit risk (where applicable).

The Company conducts a formal review of investment securities on a quarterly basis for the presence of OTTI. The Company assesses whether OTTI is present when the fair value of a debt security is less than its amortized cost basis at the statement of condition date. Under these circumstances, OTTI is considered to have occurred (1) if we intend to sell the security; (2) if it is "more likely than not" we will be required to sell the security before recovery of its amortized cost basis; or (3) the present value of expected cash flows is not anticipated to be sufficient to recover the entire amortized cost basis. The guidance requires that credit-related OTTI is recognized in earnings while non-credit-related OTTI on securities not expected to be sold is recognized in other comprehensive income ("OCI"). Non-credit-related OTTI is based on other factors, including illiquidity and changes in the general interest rate environment. Presentation of OTTI is made in the consolidated statement of income on a gross basis, including both the portion recognized in earnings as well as the portion recorded in OCI. The gross OTTI would then be offset by the amount of non-credit-related OTTI, showing the net as the impact on earnings.

Management does not believe any individual unrealized loss in securities within the portfolio as of June 30, 2020 represents OTTI. At June 30, 2020, the Bank had the following securities, in a loss position for 12 months or more relative to their amortized historical cost, which were deemed to have no credit impairment, thus, the disclosed unrealized losses relate directly to changes in interest rates subsequent to the acquisition of the individual securities. The Company does not intend to sell these securities, nor is it more likely than not that the Company will be required to sell these securities prior to the recovery of the amortized cost.

Of the total of 12 securities in an unrealized loss position for 12 months or more at June 30, 2020, four securities, representing 62.9% of the unamortized cost of the total securities in an unrealized loss position for 12 months or more, are issued by United States agencies or GSE's and consist of mortgage-backed securities, collateralized mortgage obligations and direct agency financings. These positions in US government agency and GSE's are deemed to have no credit impairment, thus, the disclosed unrealized losses relate primarily to changes in prepayment assumptions related to significantly lower general interest rates resulting from the economic effects of the pandemic.

In addition to these securities, the Company held the following eight non-government-issued/backed securities that were in an unrealized loss position for 12 or more months at June 30, 2020:

- One privately-issued asset-backed security, categorized as available-for-sale, with an amortized historical cost of \$268,000 and an aggregate market value of \$262,000 (unrealized loss of \$6,000 or -2.1%). This security maintains a credit rating established by one or more NRSRO above the minimum level required to be considered as investment grade and therefore, no credit-related OTTI is deemed to be present.
- Four privately-issued collateralized mortgage obligation securities, categorized as available-for-sale, with an aggregate amortized historical cost of \$3.2 million and an aggregate market value of \$2.9 million (unrealized aggregate loss of \$339,000 or -11.6 %). These securities were not rated at the time of their issuances by any NRSRO but each security remains significantly collateralized through subordination and other credit enhancements. Therefore, no credit-related OTTI is deemed to be present.
- One privately-issued asset-backed securities, categorized as held-to-maturity and collateralized by privately-issued student loans, with an aggregate amortized historical cost of \$2.1 million and an aggregate market value of \$2.0 million (aggregate unrealized loss of \$154,000 or -7.1%). This security was not rated at the time of its issuance by any NRSRO but remains significantly collateralized through subordination. Therefore, no credit-related OTTI is deemed to be present.
- One privately-issued asset-backed security, categorized as held-to-maturity and collateralized by federally-insured student loans, with an aggregate amortized historical cost of \$2.0 million and an aggregate market value of \$2.0 million (aggregate unrealized loss of \$53,000 or -2.6%). This security maintains a current investment grade rating by one or more NRSROPs and remains significantly collateralized through subordination. Therefore, no credit-related OTTI is deemed to be present.

• One privately-issued collateralized mortgage obligation security, categorized as held-to-maturity, with an aggregate amortized historical cost of \$310,000 and an aggregate market value of \$309,000 (aggregate unrealized loss of \$1,000 or -0.33%). This security was not rated at the time of its issuance by any NRSRO but remains significantly collateralized through subordination and other credit enhancements. Therefore, no credit-related OTTI is deemed to be present.

All other securities with market values less than their amortized historical costs for twelve or more months are issued by United States agencies or government sponsored enterprises and consist of mortgage-backed securities, collateralized mortgage obligations and direct agency financings. These positions in US government agency and government-sponsored enterprises are deemed to have no credit impairment, thus, the disclosed unrealized losses relate directly to changes in interest rates subsequent to the acquisition of the individual securities. The Company does not intend to sell these securities, nor is it more likely than not that the Company will be required to sell these securities prior to the recovery of the amortized cost.

In determining whether OTTI has occurred for equity securities, the Company considers the applicable factors described above and the length of time the equity security's fair value has been below the carrying amount. The Company had no equity investment securities that were impaired at June 30, 2020 or December 31, 2019.

Gross realized gains (losses) on sales of securities for the indicated periods are detailed below:

	For the	e tnree	For the six	
	moi	nths	months	
	ended J	une 30,	ended June 30,	
(In thousands)	2020	2019	2020	2019
Realized gains on investments	\$917	\$ 179	\$950	\$ 401
Realized losses on investments	(9)	(147)	(16)	(290)
	\$908	\$ 32	\$934	\$ 111

As of June 30, 2020 and December 31, 2019, securities with a fair value of \$98.5 million and \$92.4 million, respectively, were pledged to collateralize certain municipal deposit relationships. As of the same dates, securities with a fair value of \$15.0 million and \$21.3 million, respectively, were pledged against certain borrowing arrangements.

Management has reviewed its loan and mortgage-backed securities portfolios and determined that, to the best of its knowledge, only minimal exposure exists to sub-prime or other high-risk residential mortgages. With limited exceptions in the Company's investment portfolio involving the most senior tranches of securitized bonds, the Company is not in the practice of investing in, or originating, these types of investments or loans.

Note 5: Pension and Postretirement Benefits

The Company has a noncontributory defined benefit pension plan covering most employees. The plan provides defined benefits based on years of service and final average salary. On May 14, 2012, the Company informed its employees of its decision to freeze participation and benefit accruals under the plan, primarily to reduce some of the volatility in earnings that can accompany the maintenance of a defined benefit plan. The plan was frozen on June 30, 2012. Compensation earned by employees up to June 30, 2012 is used for purposes of calculating benefits under the plan but there are no future benefit accruals after this date. Participants as of June 30, 2012 will continue to earn vesting credit with respect to their frozen accrued benefits as they continue to work. In addition, the Company provides certain health and life insurance benefits for a limited number of eligible retired employees. The healthcare plan is contributory with participants' contributions adjusted annually; the life insurance plan is noncontributory. Employees with less than 14 years of service as of January 1, 1995, are not eligible for the health and life insurance retirement benefits.

The composition of net periodic pension plan and postretirement plan costs for the indicated periods is as follows:

	Pension Benefits Postretirement Benefits			Pension Benefits Postretirement Benefits				
	For the three months ended June 30,				For the six months ended June 30,			
(In thousands)	2020	2019	2020	2019	2020	2019	2020	2019
Service cost	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Interest cost	117	123	3	5	233	247	8	11
Expected return on plan assets	(274)	(233)	_	_	(547)	(467)	_	_
Amortization of prior service credits	_	_	(1)	(1)	_	_	(2)	(2)
Amortization of net losses	57	82	3	3	114	164	5	6
Net periodic benefit plan (benefit) cost	\$(100)	\$ (28)	\$ 5	\$ 7	\$(200)	\$ (56)	\$ 11	\$ 15

The Company will evaluate the need for further contributions to the defined benefit pension plan during 2020. The prepaid pension asset is recorded in other assets on the statement of condition as of June 30, 2020 and December 31, 2019.

Note 6: Loans

Major classifications of loans at the indicated dates are as follows:

(In thousands)	June 30, 2020	December 31, 2019
Residential mortgage loans:		
1-4 family first-lien residential mortgages	\$212,741	\$ 209,559
Construction	3,678	3,963
Loans held-for-sale (1)		35,790
Total residential mortgage loans	216,419	249,312
Commercial loans:		
Real estate	260,824	254,257
Lines of credit	53,509	58,617
Other commercial and industrial	83,167	82,092
Paycheck Protection Program loans	73,774	_
Tax exempt loans	7,644	8,067
Total commercial loans	478,918	403,033
Consumer loans:		
Home equity and junior liens	42,587	46,389
Other consumer	69,915	82,607
Total consumer loans	112,502	128,996
Total loans	807,839	781,341
Net deferred loan fees	(1,830)	110
Less allowance for loan losses	(10,553)	(8,669)
Loans receivable, net	\$795,456	\$ 772,782

⁽¹⁾ Based on ASC 948, Mortgage Banking, loans shall be classified as held-for-sale once a decision has been made to sell the loans and shall be transferred to the held-for-sale category at lower of cost or fair value. At December 31, 2019, the loans under contract to be sold had a principal balance of \$35.8 million and net deferred fees of \$146,000. These loans were transferred at their amortized cost of \$35.9 million as of December 31, 2019, as the fair value of these loans was greater than the amortized cost.

Although the Bank may sometimes purchase or fund loan participation interests outside of its primary market areas, the Bank generally originates residential mortgage, commercial, and consumer loans largely to customers throughout Oswego and Onondaga counties. Although the Bank has a diversified loan portfolio, a substantial portion of its borrowers' abilities to honor their loan contracts is dependent upon the counties' employment and economic conditions.

As part of the Company's overall balance sheet management strategies and the management's ongoing efforts to profitably deploy its increased capital position following the equity sales transactions completed in May 2019, the Bank acquired seven diverse pools of loans, originated by unrelated third parties, in six separate transactions during 2019. The purchase of participations in loans that are originated by third parties only occurs after the completion of thorough pre-acquisition due diligence. Loans in which the Company acquires a participating interest are determined to meet, in all material respects, the Company's internal underwriting policies, including credit and collateral suitability thresholds, prior to acquisition. In addition, the financial condition of the originating entity, which are generally retained as the ongoing loan servicing provider for participations acquired by the Bank, are analyzed prior to the acquisition of the participating interests and monitored on a regular basis thereafter for the life of those interests.

The following table presents details regarding the purchased loan pools:

(In thousands, except number of loans)	June 30, 2020	December 31, 2019
Purchased residential real estate loans		
Original Balance	\$ 2,100	\$ 2,100
Current Balance	2,000	2,100
Unamortized Premium	131	135
Percent Owned	100%	100%
Number of Loans	25	25
Maturity range	22-24 years	22-24 years
Cumulative net charge-offs	_	_
Purchased other commercial and industrial loans		
Original Balance	6,800	6,800
Current Balance	6,100	6,600
Unamortized Premium	_	_
Percent Owned	100%	100%
Number of Loans	41	43
Maturity range	4-10 years	4-10 years
Cumulative net charge-offs	_	_
Purchased home equity lines of credit:		
Original Balance	21,900	21,900
Current Balance	17,300	20,100
Unamortized Premium	347	390
Percent Owned	100%	100%
Number of Loans	335	376
Maturity range	4-30 years	4-30 years
Cumulative net charge-offs	_	_
Purchased automobile loans:		
Original Balance	50,400	50,400
Current Balance	22,300	27,200
Unamortized Premium	768	930
Percent Owned	90%	90%
Number of Loans	1,484	1,657
Maturity range	2-6 years	2-6 years
Cumulative net charge-offs	212	196

(In thousands, except number of loans)	June 30, 	December 31, 2019
Purchased unsecured consumer loan pool 1:		
Original Balance	5,400	5,400
Current Balance	4,300	5,000
Unamortized Premium	_	_
Percent Owned	100%	100%
Number of Loans	82	87
Maturity range	4-10 years	4-10 years
Cumulative net charge-offs	_	_
Purchased unsecured consumer loan pool 2:		
Original Balance	26,600	26,600
Current Balance	21,200	25,800
Unamortized Premium	86	114
Percent Owned	59%	59%
Number of Loans	2,535	2,768
Maturity range	3-5 years	3-5 years
Cumulative net charge-offs	219	_
Purchased unsecured consumer loan pool 3:		
Original Balance	10,300	10,300
Current Balance	7,600	10,300
Unamortized Premium	185	245
Percent Owned	100%	100%
Number of Loans	3,609	4,259
Maturity range	0-7 years	0-7 years
Cumulative net charge-offs	_	_

As of June 30, 2020 and December 31, 2019, residential mortgage loans with a carrying value of \$107.7 million and \$136.9 million, respectively, have been pledged by the Company to the Federal Home Loan Bank of New York ("FHLBNY") under a blanket collateral agreement to secure the Company's line of credit and term borrowings.

Loan Origination / Risk Management

The Company's lending policies and procedures are presented in Note 5 to the audited consolidated financial statements included in the 2019 Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 23, 2020 and have not changed. As part of the execution of the Company's overall balance sheet management strategies, the Bank will acquire participating interests in loans originated by unrelated third parties on a sporadic basis. The purchase of participations in loans that are originated by third parties only occurs after the completion of thorough pre-acquisition due diligence. Loans in which the Company acquires a participating interest are determined to meet, in all material respects, the Company's internal underwriting policies, including credit and collateral suitability thresholds, prior to acquisition. In addition, the financial condition of the originating financial institutions, which are generally retained as the ongoing loan servicing provider for participations acquired by the Bank, are analyzed prior to the acquisition of the participating interests and monitored on a regular basis thereafter for the life of those interests.

To develop and document a systematic methodology for determining the allowance for loan losses, the Company has divided the loan portfolio into three portfolio segments, each with different risk characteristics but with similar methodologies for assessing risk. Each portfolio segment is broken down into loan classes where appropriate. Loan classes contain unique measurement attributes, risk characteristics, and methods for monitoring and assessing risk that are necessary to develop the allowance for loan losses. Unique characteristics such as borrower type, loan type, collateral type, and risk characteristics define each class.

The following table illustrates the portfolio segments and classes for the Company's loan portfolio:

Portfolio Segment	Class
Residential Mortgage Loans	1-4 family first-lien residential mortgages Construction
Commercial Loans	Real estate Lines of credit Other commercial and industrial Tax exempt loans
Consumer Loans	Home equity and junior liens Other consumer

The following tables present the classes of the loan portfolio, not including net deferred loan costs, summarized by the aggregate pass rating and the classified ratings of special mention, substandard and doubtful within the Company's internal risk rating system as of the dates indicated:

	As of June 30, 2020				
(In thousands)	Pass	Special Mention	Substandard	Doubtful	Total
Residential mortgage loans:	·				
1-4 family first-lien residential mortgages	\$208,783	\$ 1,295	\$ 1,609	\$1,054	\$212,741
Construction	3,678	_	_	_	3,678
Loans held-for-sale	_	_		_	
Total residential mortgage loans	212,461	1,295	1,609	1,054	216,419
Commercial loans:					
Real estate	243,749	9,150	7,218	707	260,824
Lines of credit	46,241	4,297	2,971	_	53,509
Other commercial and industrial	72,499	8,689	1,940	39	83,167
Paycheck Protection Program loans	73,774	_		_	73,774
Tax exempt loans	7,644	_	_	_	7,644
Total commercial loans	443,907	22,136	12,129	746	478,918
Consumer loans:					
Home equity and junior liens	41,725	221	367	274	42,587
Other consumer	69,619	101	195		69,915
Total consumer loans	111,344	322	562	274	112,502
Total loans	\$767,712	\$23,753	\$ 14,300	\$2,074	\$807,839

		As of December 31, 2019				
(In thousands)	Pass	Special Mention	Substandard	Doubtful	Total	
Residential mortgage loans:	<u> </u>		<u> </u>			
1-4 family first-lien residential mortgages	\$205,554	\$ 1,093	\$ 1,731	\$1,181	\$209,559	
Construction	3,963	_	_	_	3,963	
Loans held-for-sale	35,790				35,790	
Total residential mortgage loans	245,307	1,093	1,731	1,181	249,312	
Commercial loans:						
Real estate	238,288	12,473	3,194	302	254,257	
Lines of credit	50,396	7,945	276	_	58,617	
Other commercial and industrial	72,653	8,473	923	43	82,092	
Tax exempt loans	8,067	_	_		8,067	
Total commercial loans	369,404	28,891	4,393	345	403,033	
Consumer loans:						
Home equity and junior liens	45,414	191	477	307	46,389	
Other consumer	82,252	167	188	_	82,607	
Total consumer loans	127,666	358	665	307	128,996	
Total loans	\$742,377	\$30,342	\$ 6,789	\$1,833	\$781,341	

Management has reviewed its loan portfolio and determined that, to the best of its knowledge, no material exposure exists to sub-prime or other high-risk residential mortgages. The Company is not in the practice of originating these types of loans.

Nonaccrual and Past Due Loans

Loans are placed on nonaccrual when the contractual payment of principal and interest has become 90 days past due or management has serious doubts about further collectability of principal or interest, even though the loan may be currently performing.

Loans are considered past due if the required principal and interest payments have not been received within thirty days of the payment due date.

An age analysis of past due loans, not including net deferred loan costs, segregated by portfolio segment and class of loans, as of June 30, 2020 and December 31, 2019, are detailed in the following tables:

				ine 30, 2020		
(In thousands)	30-59 Days	60-89 Days	90 Days	Total Past	6 .	Total Loans
Residential mortgage loans:	Past Due	Past Due	and Over	<u>Due</u>	Current	Receivable
1-4 family first-lien residential mortgages	\$ 988	\$ 130	\$ 1,038	\$ 2,156	\$ 210,585	\$ 212,741
Construction	ψ 500 —	Ф 150	Ψ 1,050 —	Ψ 2,150 —	3,678	3,678
Loans held-for-sale	_	_	_	_		
Total residential mortgage loans	988	130	1,038	2,156	214,263	216,419
Commercial loans:			1,050	2,150	214,205	210,415
Real estate	74	2,000	4,034	6,108	254,716	260,824
Lines of credit	1,299	1,844	430	3,573	49,936	53,509
Other commercial and industrial	6,645	4,076	1,992	12,713	70,454	83,167
Paycheck Protection Program loans		.,070			73,774	73,774
Tax exempt loans	_	_		_	7,644	7,644
Total commercial loans	8,018	7,920	6,456	22,394	456,524	478,918
Consumer loans:		7,020				0,510
Home equity and junior liens	222	_	344	566	42,021	42,587
Other consumer	323	126	196	645	69,270	69,915
Total consumer loans	545	126	540	1,211	111,291	112,502
Total loans	\$ 9,551	\$ 8,176	\$ 8,034	\$ 25,761	\$ 782,078	\$ 807,839
Total loans	Ψ 5,551	Φ 0,170	\$ 0,054	\$ 23,701	\$ 702,070	\$ 007,000
			As of Dose	ombor 21, 2010		
	30-59 Days	60-89 Days	As of Dece	ember 31, 2019 Total Past		Total Loans
(In thousands)	30-59 Days Past Due	60-89 Days Past Due			Current	Total Loans Receivable
Residential mortgage loans:	Past Due	Past Due	90 Days and Over	Total Past Due		Receivable
Residential mortgage loans: 1-4 family first-lien residential mortgages		Past Due \$ 744	90 Days	Total Past	\$ 206,255	Receivable \$ 209,559
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction	Past Due	Past Due	90 Days and Over	Total Past Due \$ 3,304	\$ 206,255 3,963	Receivable \$ 209,559 3,963
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale	Past Due 947 — —	Past Due \$ 744 ——————————————————————————————————	90 Days and Over \$ 1,613	Total Past	\$ 206,255 3,963 35,790	\$ 209,559 3,963 35,790
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale Total residential mortgage loans	Past Due	Past Due \$ 744	90 Days and Over	Total Past Due \$ 3,304	\$ 206,255 3,963	Receivable \$ 209,559 3,963
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale Total residential mortgage loans Commercial loans:	947 ————————————————————————————————————	Past Due \$ 744 744	90 Days and Over \$ 1,613 ————————————————————————————————————	Total Past Due \$ 3,304 3,304	\$ 206,255 3,963 35,790 246,008	\$ 209,559 3,963 35,790 249,312
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale Total residential mortgage loans Commercial loans: Real estate	947 947 953	Past Due \$ 744 744 100	90 Days and Over \$ 1,613 ————————————————————————————————————	Total Past Due \$ 3,304	\$ 206,255 3,963 35,790 246,008	\$ 209,559 3,963 35,790 249,312
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale Total residential mortgage loans Commercial loans: Real estate Lines of credit	947 947 953 4,464	Past Due \$ 744 744 100 25	90 Days and Over \$ 1,613 ————————————————————————————————————	\$ 3,304	\$ 206,255 3,963 35,790 246,008 250,933 54,060	\$ 209,559 3,963 35,790 249,312 254,257 58,617
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial	947 947 953	Past Due \$ 744 744 100	90 Days and Over \$ 1,613 ————————————————————————————————————	Total Past Due \$ 3,304	\$ 206,255 3,963 35,790 246,008 250,933 54,060 78,439	\$ 209,559 3,963 35,790 249,312 254,257 58,617 82,092
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial Tax exempt loans	947 947 953 4,464 2,747	Past Due \$ 744 744 100 25 315	90 Days and Over \$ 1,613 ————————————————————————————————————	Total Past Due \$ 3,304 3,304 3,324 4,557 3,653	\$ 206,255 3,963 35,790 246,008 250,933 54,060 78,439 8,067	\$ 209,559 3,963 35,790 249,312 254,257 58,617 82,092 8,067
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial Tax exempt loans Total commercial loans	947 947 953 4,464	Past Due \$ 744 744 100 25	90 Days and Over \$ 1,613 ————————————————————————————————————	\$ 3,304	\$ 206,255 3,963 35,790 246,008 250,933 54,060 78,439	\$ 209,559 3,963 35,790 249,312 254,257 58,617 82,092
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial Tax exempt loans Total commercial loans Consumer loans:	947 947 953 4,464 2,747 — 8,164	Past Due \$ 744 744 100 25 315 440	90 Days and Over \$ 1,613 ————————————————————————————————————	\$ 3,304 3,304 3,324 4,557 3,653 11,534	\$ 206,255 3,963 35,790 246,008 250,933 54,060 78,439 8,067 391,499	\$ 209,559 3,963 35,790 249,312 254,257 58,617 82,092 8,067 403,033
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial Tax exempt loans Total commercial loans Consumer loans: Home equity and junior liens	947 947 953 4,464 2,747 — 8,164	Past Due \$ 744	90 Days and Over \$ 1,613 ————————————————————————————————————	\$ 3,304 3,304 3,324 4,557 3,653 11,534	\$ 206,255 3,963 35,790 246,008 250,933 54,060 78,439 8,067 391,499	\$ 209,559 3,963 35,790 249,312 254,257 58,617 82,092 8,067 403,033
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial Tax exempt loans Total commercial loans Consumer loans:	947 947 953 4,464 2,747 8,164 315 335	Past Due \$ 744	90 Days and Over \$ 1,613 1,613 2,271 68 591 2,930 480 151	\$ 3,304 \$ 3,304 3,304 3,324 4,557 3,653 —— 11,534 925 536	\$ 206,255	\$ 209,559 3,963 35,790 249,312 254,257 58,617 82,092 8,067 403,033 46,389 82,607
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Loans held-for-sale Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial Tax exempt loans Total commercial loans Consumer loans: Home equity and junior liens	947 947 953 4,464 2,747 — 8,164	Past Due \$ 744	90 Days and Over \$ 1,613 ————————————————————————————————————	\$ 3,304 3,304 3,324 4,557 3,653 11,534	\$ 206,255 3,963 35,790 246,008 250,933 54,060 78,439 8,067 391,499	\$ 209,559 3,963 35,790 249,312 254,257 58,617 82,092 8,067 403,033

Nonaccrual loans, segregated by class of loan, were as follows:

(In thousands)	June 30, 2020	December 31, 2019
Residential mortgage loans:		
1-4 family first-lien residential mortgages	\$1,038	\$ 1,613
	1,038	1,613
Commercial loans:		
Real estate	4,094	2,343
Lines of credit	430	68
Other commercial and industrial	2,283	591
	6,807	3,002
Consumer loans:		
Home equity and junior liens	344	480
Other consumer	196	151
	540	631
Total nonaccrual loans	\$8,385	\$ 5,246

The Company is required to disclose certain activities related to Troubled Debt Restructurings ("TDR") in accordance with accounting guidance. Certain loans have been modified in a TDR where economic concessions have been granted to a borrower who is experiencing, or expected to experience, financial difficulties. These economic concessions could include a reduction in the loan interest rate, extension of payment terms, reduction of principal amortization, or other actions that it would not otherwise consider for a new loan with similar risk characteristics.

The Company is required to disclose new TDRs for each reporting period for which an income statement is being presented. The pre-modification outstanding recorded investment is the principal loan balance less the provision for loan losses before the loan was modified as a TDR. The post-modification outstanding recorded investment is the principal balance less the provision for loan losses after the loan was modified as a TDR. Additional provision for loan losses is the change in the allowance for loan losses between the pre-modification outstanding recorded investment and post-modification outstanding recorded investment.

The Company had no loans that were modified as TDRs for the three months ended June 30, 2020.

The Company had no loans that were modified as TDRs for the six months ended June 30, 2020.

The table below details one loan that was modified as a TDR for the three months ended June 30, 2019.

		For the three months ended June 30, 2019						
	•	Pre-modification	Post-modification					
	Number of	outstanding recorded	outstanding recorded	Additional provision for				
(In thousands)	loans	investment	investment	loan losses				
Residential real estate loans	1	\$ 205	\$ 250	\$				

The TDR evaluated for impairment for the three months ended June 30, 2019 was classified as a TDR due to economic concessions granted, which consisted of additional funds advanced without associated increases in collateral and an extended maturity date that will result in a delay in payment from the original contractual maturity.

The table below details one loan that was modified as a TDR for the six months ended June 30, 2019.

		For the six months ended June 30, 2019							
	•	Pre-modification Post-modification							
	Number of	outstand	ling recorded	outstand	ing recorded	Addition	al provision for		
(In thousands)	loans	investment		investment		inve	estment	loa	an losses
Residential real estate loans	1	\$	205	\$	250	\$			

The TDR evaluated for impairment for the six months ended June 30, 2019 was classified as a TDR due to economic concessions granted, which consisted of additional funds advanced without associated increases in collateral and an extended maturity date that will result in a delay in payment from the original contractual maturity.

The Company is required to disclose loans that have been modified as TDRs within the previous 12 months in which there was payment default after the restructuring. The Company defines payment default as any loans 90 days past due on contractual payments.

The Company had no loans that were modified as TDRs during the twelve months prior to June 30, 2020, which had subsequently defaulted during the six months ended June 30, 2020.

The Company had no loans that were modified as TDRs during the twelve months prior to June 30, 2019, which had subsequently defaulted during the six months ended June 30, 2019.

The United States has been operating under a state of emergency related to the Coronavirus Disease 2019 ("COVID-19") pandemic since March 13, 2020. The direct and indirect effects of the COVID-19 pandemic have resulted in a dramatic reduction in economic activity that has severely hampered the ability for businesses and consumers to meet their current repayment obligations. The Coronavirus Aid, Relief, and Economic Security Act ("CARES Act"), signed into law on March 27, 2020, in addition to providing financial assistance to both businesses and consumers, creates a forbearance program for federally-backed mortgage loans, protects borrowers from negative credit reporting due to loan accommodations related to the national emergency, and provides financial institutions the option to temporarily suspend certain requirements under GAAP related to troubled debt restructurings for a limited period of time to account for the effects of COVID-19. The banking regulatory agencies have likewise issued guidance encouraging financial institutions to work prudently with borrowers who are, or may be, unable to meet their contractual payment obligations because of the effects of COVID-19. That guidance, with concurrence of the Financial Accounting Standards Board, and provisions of the CARES Act allow modifications made on a good faith basis in response to COVID-19 to borrowers who were generally current with their payments prior to any relief, to not be treated as troubled debt restructurings. Modifications may include payment deferrals, fee waivers, extensions of repayment term, or other delays in payment. Through July 7, 2020, the Bank granted payment deferral requests primarily for 90 days, on 556 loans representing approximately \$145.6 million of existing loan balances. To the extent that such modifications meet the criteria previously described, such modifications are not expected to be classified as troubled debt restructurings.

When the Company modifies a loan within a portfolio segment that is individually evaluated for impairment, a potential impairment is analyzed either based on the present value of the expected future cash flows discounted at the interest rate of the original loan terms or the fair value of the collateral less costs to sell. If it is determined that the value of the loan is less than its recorded investment, then impairment is recognized as a component of the provision for loan losses, an associated increase to the allowance for loan losses or as a charge-off to the allowance for loan losses in the current period.

Impaired Loans

The following table summarizes impaired loan information by portfolio class at the indicated dates:

)	December 31, 2019			
(In thousands)	Recorded Investment	Unpaid Principal Balance	Related Allowance	Recorded Investment	Unpaid Principal Balance	Related Allowance
With no related allowance recorded:						
1-4 family first-lien residential mortgages	\$ 680	\$ 680	\$ —	\$ 1,027	\$1,027	\$ —
Commercial real estate	4,217	4,294	_	3,996	4,067	_
Commercial lines of credit	80	80	_	86	86	
Other commercial and industrial	333	353	_	69	77	
Home equity and junior liens	77	77	_	40	40	_
Other consumer	85	85	_	55	55	_
With an allowance recorded:						
1-4 family first-lien residential mortgages	918	918	153	584	584	97
Commercial real estate	444	444	64	450	450	78
Commercial lines of credit	98	98	98	98	98	98
Other commercial and industrial	729	729	563	866	866	406
Home equity and junior liens	142	142	142	180	180	150
Other consumer	_	_	_	36	36	1
Total:						
1-4 family first-lien residential mortgages	1,598	1,598	153	1,611	1,611	97
Commercial real estate	4,661	4,738	64	4,446	4,517	78
Commercial lines of credit	178	178	98	184	184	98
Other commercial and industrial	1,062	1,082	563	935	943	406
Home equity and junior liens	219	219	142	220	220	150
Other consumer	85	85		91	91	1
Totals	\$ 7,803	\$7,900	\$ 1,020	\$ 7,487	\$ 7,566	\$ 830

At June 30, 2020, the Company had outstanding balances of \$12.1 million of commercial loans categorized as substandard under the Company's internal classification policies. Of the \$12.1 million in commercial loans categorized as substandard, \$6.2 million represent loans that were accruing interest and \$5.9 million represent loans that were in nonaccrual status at June 30, 2020. At June 30, 2020, the Company had a total of \$6.8 million in nonaccrual commercial loans of which \$900,000 were rated special mention or better. Per the Company's policy, a commercial loan is measured for impairment if: (1) the loan is rated substandard or worse, (2) is on nonaccrual, and (3) above our TRC threshold balance of \$100,000 or classified as a TDR. See the Application of Critical Accounting Policies in Item 2 for further details. Internal classifications were determined at June 30, 2020 based on the Company's evaluation of individual loans considering all factors in evidence as of the evaluation date. Due to the currently high degree of economic uncertainty, related primarily to the ongoing COVID-19 pandemic, loan classifications and estimates of future loan losses may be subject to significant changes in future periods.

The following table presents the average recorded investment in impaired loans for the periods indicated:

	For the three r June	For the six months ended June 30,		
(In thousands)	2020	2019	2020	2019
1-4 family first-lien residential mortgages	\$ 1,601	\$ 1,528	\$ 1,604	\$ 1,627
Commercial real estate	4,544	3,662	4,511	3,399
Commercial lines of credit	180	344	181	314
Other commercial and industrial	972	1,100	959	1,008
Home equity and junior liens	219	227	219	220
Other consumer	88	99	89	66
Total	\$ 7,604	\$ 6,960	\$ 7,563	\$ 6,634

The following table presents the cash basis interest income recognized on impaired loans for the periods indicated:

		ree months ended June 30,		months ended e 30,
(In thousands)	2020	2019	2020	2019
1-4 family first-lien residential mortgages	\$ 15	\$ 23	\$ 27	\$ 35
Commercial real estate	38	57	69	85
Commercial lines of credit	3	14	5	18
Other commercial and industrial	6	24	22	38
Home equity and junior liens	1	3	4	6
Other consumer	2	3	3	3
Total	\$ 65	\$ 124	\$ 130	\$ 185

Note 7: Allowance for Loan Losses

Management extensively reviews recent trends in historical losses, qualitative factors and specific reserve needs on loans individually evaluated for impairment in its determination of the adequacy of the allowance for loan losses. We recorded \$1.1 million in provision for loan losses for the three month period ended June 30, 2020, as compared to \$610,000 for the three month period ended June 30, 2019. The \$536,000 increase in the provision for loan losses in the second quarter of 2020, as compared to the same quarter in 2019, resulted from year-over-year increases in: (1) the qualitative factors used in determining the allowance for loan losses, (2) the size of the loan portfolio, and (3) delinquent and nonaccrual loans. The increase in the quantitative factors used in determining the provision for loan losses reflects the substantial increase in economic uncertainty and the resultant potential for increased credit losses in future periods as a consequence of the COVID-19 pandemic. Outstanding loan balances increased \$113.2 million, or 16.3%, in the quarter ended June 30, 2020, as compared to the same quarter in the previous year, and therefore required a corresponding increase in the estimable and probable loan losses inherent in the loan portfolio. Finally, the provision for loan losses in the quarter ended June 30, 2020 was further increased, as compared to the same quarter in 2019, by the effects of an increase in the ratio of delinquent loans to total loans, which increased to 3.19% at June 30, 2020 as compared to 2.45% at June 30, 2019, coupled with an increase in nonaccrual loans that increased \$4.6 million to \$8.4 million at June 30, 2020 as compared to \$3.8 million at June 30, 2019.

For the first six months of 2020, we recorded \$2.2 million in provision for loan losses as compared to \$754,000 in the same prior year six month period. This \$1.5 million increase in the provision for loan losses resulted from year-over-year increases in: (1) the qualitative factors used in determining the adequacy of the allowance for loan losses, (2) the size of the loan portfolio, and (3) delinquent and nonaccrual loans. The increase in the quantitative

factors used in determining the provision for loan losses reflects the substantial increase in economic uncertainty and the resultant potential for increased credit losses in future periods as a consequence of the COVID-19 pandemic.

Summarized in the tables below are changes in the allowance for loan losses for the indicated periods and information pertaining to the allocation of the allowance for loan losses, balances of the allowance for loan losses, loans receivable based in individual, and collective impairment evaluation by loan portfolio class. An allocation of a portion of the allowance to a given portfolio class does not limit the Company's ability to absorb losses in another portfolio class.

	For the three months ended June 30, 2020											
(In thousands)	fir res	family st-lien idential ortgage	con	sidential struction ortgage		mmercial al estate		mmercial s of credit	cor	Other nmercial and dustrial	Pro	ycheck tection ogram
Allowance for loan losses:												
Beginning Balance	\$	731	\$		\$	4,243	\$	1,218	\$	1,758	\$	
Charge-offs		(99)		_		_		(48)		(9)		_
Recoveries				_		_		_		_		_
Provisions		124		_		15		38		317		_
Ending balance	\$	756	\$		\$	4,258	\$	1,208	\$	2,066	\$	
Ending balance: related to loans individually evaluated for impairment	\$	153	\$	_	\$	64	\$	98	\$	563	\$	_
Ending balance: related to loans collectively evaluated for impairment	\$	603	\$		\$	4,194	\$	1,110	\$	1,503	\$	_
Loans receivables:												
Ending balance	\$2	12,741	\$	3,678	\$ 2	260,824	\$	53,509	\$	83,167	\$ 7	3,774
Ending balance: individually evaluated for impairment	\$	1,598	\$		\$	4,661	\$	178	\$	1,062	\$	
Ending balance: collectively evaluated for impairment	\$2	11,143	\$	3,678	\$ 2	256,163	\$	53,331	\$	82,105	\$ 7	3,774

	Tax exempt	Home equity and junior liens	Other Consumer	Unallocated	Total
Allowance for loan losses:					
Beginning Balance	\$ 1	\$ 611	\$ 846	\$ 198	9,606
Charge-offs	_	_	(52)	_	(208)
Recoveries	_	_	9		9
Provisions	_	33	252	367	1,146
Ending balance	\$ 1	\$ 644	\$ 1,055	\$ 565	\$ 10,553
Ending balance: related to loans individually evaluated	<u> </u>				
for impairment	\$ —	\$ 142	\$ —	\$ —	\$ 1,020
Ending balance: related to loans collectively evaluated		<u> </u>			
for impairment	<u>\$ 1</u>	\$ 502	\$ 1,055	\$ 565	\$ 9,533
Loans receivables:					
Ending balance	\$ 7,644	\$ 42,587	\$ 69,915	<u> </u>	\$ 807,839
Ending balance: individually evaluated for impairment	\$ —	\$ 219	\$ 85	\$ —	\$ 7,803
Ending balance: collectively evaluated for impairment	\$ 7,644	\$ 42,368	\$ 69,830	\$ —	\$ 800,036

	For the six months ended June 30, 2020							
	1-4 family				Other			
	first-lien	Residential		Commercial	commercial	Paycheck		
	residential	construction	Commercial	lines of	and	Protection		
(In thousands)	mortgage	mortgage	real estate	credit	industrial	Program		
Allowance for loan losses:								
Beginning Balance	\$ 580	\$ —	\$ 4,010	\$ 1,195	\$ 1,645	\$ —		
Charge-offs	(125)	_	_	(48)	(9)	_		
Recoveries	1	_	_	2	_	_		
Provisions	300	_	248	59	430	_		
Ending balance	\$ 756	\$ —	\$ 4,258	\$ 1,208	\$ 2,066	\$ —		

	Tax exempt	Home equity and junior liens	Other consumer	Unallocated	Total
Allowance for loan losses:					
Beginning Balance	\$ 1	\$ 553	\$ 413	\$ 272	\$ 8,669
Charge-offs	-	(28)	(185)	_	(395)
Recoveries	_	29	34	_	66
Provisions	_	90	793	293	2,213
Ending balance	\$ 1	\$ 644	\$ 1,055	\$ 565	\$10,553

	For the three months ended June 30, 2019								
(In thousands)	1-4 family first-lien residential mortgage	R	esidential instruction nortgage		nercial estate	lin	mercial les of redit	COI	Other mmercial and ndustrial
Allowance for loan losses:		_							
Beginning Balance	\$ 722	2 \$		\$	3,370	\$	802	\$	1,560
Charge-offs	(11	L)	_		_		(24)		(1)
Recoveries	1	L	_		_		_		_
Provisions	12	<u> </u>			82		367		143
Ending balance	\$ 724	\$		\$	3,452	\$	1,145	\$	1,702
Ending balance: related to loans individually evaluated for impairment	\$ 104	\$	_	\$	108	\$	204	\$	287
Ending balance: related to loans collectively evaluated for impairment	\$ 620	\$	_	\$	3,344	\$	941	\$	1,415
Loans receivables:									
Ending balance	\$239,422	<u>\$</u>	3,966	\$ 22	5,794	\$ 5	6,569	\$	79,590
Ending balance: individually evaluated for impairment	\$ 1,633	\$		\$.	4,461	\$	370	\$	1,146
Ending balance: collectively evaluated for impairment	\$237,789	\$	3,966	\$ 22	1,333	\$ 5	6,199	\$	78,444
		ī	Home equity						
	Tax exem		and junior liens		Other nsumer	Una	allocated		Total
Allowance for loan losses:	CHELL		110110		<u> </u>	<u> </u>			10101
Beginning Balance	\$	1 5	430	\$	399	\$	_	\$	7,284
Charge-offs	-	_	_		(40)		_		(76)
Recoveries	_	_	_		6		_		7
Provisions (credits)			(44)		50				610
Ending balance	\$	1 5	386	\$	415	\$		\$	7,825
Ending balance: related to loans individually evaluated for impairment	\$ -	_	136	\$	6	\$		\$	845
Ending balance: related to loans collectively evaluated for impairment	\$	1 5	250	\$	409	\$		\$	6,980
Loans receivables:									
Ending balance	\$8,8	03	26,214	\$5	2,508	\$		\$6	592,866
Ending balance: individually evaluated for impairment	\$ -	_	5 247	\$	97	\$		\$	7,954
Ending balance: collectively evaluated for impairment	\$8,8	03	25,967	\$5	2,411	\$		\$€	684,912

	For the six months ended June 30, 2019							
(In thousands) Allowance for loan losses:	1-4 family first-lien Residential residential construction Commercial mortgage mortgage real estate		Commercial lines of credit	Other commercial and industrial				
Beginning Balance	\$ 766	\$ —	\$ 3,578	\$ 730	\$ 1,285			
Charge-offs	(11)	_	_	(131)	(2)			
Recoveries	1	_	_		_			
Provisions (credits)	(32)	_	(126)	546	419			
Ending balance	\$ 724	\$ —	\$ 3,452	\$ 1,145	\$ 1,702			
	Tax exempt	Home equity and junior liens	Other consumer	Unallocated	Total			
Allowance for loan losses:								
Beginning Balance	\$ 1	\$ 409	\$ 385	\$ 152	\$7,306			
Charge-offs	_	_	(107)	_	(251)			
Recoveries	_	_	15		16			
Provisions (credits)		(23)	122	(152)	754			
Ending balance	\$ 1	\$ 386	\$ 415	<u> </u>	\$7,825			

The Company's methodology for determining its allowance for loan losses includes an analysis of qualitative factors that are added to the historical loss rates in arriving at the total allowance for loan losses needed for this general pool of loans. The qualitative factors include:

- Changes in national and local economic trends;
- The rate of growth in the portfolio;
- Trends of delinquencies and nonaccrual balances;
- · Changes in loan policy; and
- Changes in lending management experience and related staffing.

Each factor is assigned a value to reflect improving, stable or declining conditions based on management's best judgment using relevant information available at the time of the evaluation. These qualitative factors, applied to each product class, make the evaluation inherently subjective, as it requires material estimates that may be susceptible to significant revision as more information becomes available. Adjustments to the factors are supported through documentation of changes in conditions in a narrative accompanying the allowance for loan losses analysis and calculation.

The allocation of the allowance for loan losses summarized on the basis of the Company's calculation methodology was as follows:

		June 30, 2020							
(In thousands)	1-4 family first-lien residential	Residential construction	Commercial	Other commercial and industrial					
Specifically reserved	mortgage \$ 153	mortgage \$ —	real estate \$ 64	lines of credit \$ 98	\$ 563				
Historical loss rate	71	_	99	152	61				
Qualitative factors	532	_	4,095	958	1,442				
Total	\$ 756	<u>\$</u>	\$ 4,258	\$ 1,208	\$ 2,066				

	Tax exempt	Home equity and junior liens	Other consumer	Unallocated	Total
Specifically reserved	\$ —	\$ 142		\$ —	\$ 1,020
Historical loss rate	_	211		_	1,399
Qualitative factors	1	291	250	_	7,569
Other	_	_	_	565	565
Total	\$ 1	\$ 644	\$ 1,055	\$ 565	\$10,553
					
			June 30, 2019		
(In thousands)	1-4 family first-lien residential mortgage	Residential construction mortgage	Commercial real estate	Commercial lines of credit	Other commercial and industrial
Specifically reserved	\$ 104	\$ —	\$ 108	\$ 204	\$ 287
Historical loss rate	64		89	35	28
Qualitative factors	556		3,255	906	1,387
Total	\$ 724	\$ —	\$ 3,452	\$ 1,145	\$ 1,702
	Tax exempt	Home equity	Other consumer	Unallocated	Total
Specifically reserved	\$ —	\$ 136	\$ 6	\$ —	\$ 845
Historical loss rate	_	1	144	_	361
Qualitative factors	1	249	265		6,619
Total	\$ 1	\$ 386	\$ 415	<u>\$</u>	\$7,825

Note 8: Foreclosed Real Estate

The Company is required to disclose the carrying amount of foreclosed residential real estate properties held as a result of obtaining physical possession of the property at each reporting period.

	Number of	June 30,	Number of	December 31,
(Dollars in thousands)	properties	2020	properties	2019
Foreclosed residential real estate	1	\$ 26		\$ —

At June 30, 2020 and December 31, 2019, the Company reported \$685,000 and \$341,000, respectively, in residential real estate loans in the process of foreclosure.

Note 9: Guarantees

The Company does not issue any guarantees that would require liability recognition or disclosure, other than its standby letters of credit. Generally, all letters of credit, when issued have expiration dates within one year. The credit risks involved in issuing letters of credit is essentially the same as those that are involved in extending loan facilities to customers. The Company generally holds collateral and/or personal guarantees supporting these commitments. The Company had \$2.3 million of standby letters of credit as of June 30, 2020. Management believes that the proceeds obtained through a liquidation of collateral and the enforcement of guarantees would be sufficient to cover the potential amount of future payments required under the corresponding guarantees. The fair value of standby letters of credit was not significant to the Company's consolidated financial statements.

Note 10: Fair Value Measurements

Accounting guidance related to fair value measurements and disclosures specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable

inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions. These two types of inputs have created the following fair value hierarchy:

Level 1 - Quoted prices (unadjusted) for identical assets or liabilities in active markets that the entity has the ability to access as of the measurement date.

Level 2 — Quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.

Level 3 – Model-derived valuations in which one or more significant inputs or significant value drivers are unobservable.

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

In determining fair value, the Company utilizes valuation techniques that maximize the use of observable inputs, minimize the use of unobservable inputs, to the extent possible, and considers counterparty credit risk in its assessment of fair value.

The Company used the following methods and significant assumptions to estimate fair value:

Investment securities: The fair values of available-for-sale and marketable equity securities are obtained from an independent third party and are based on quoted prices on nationally recognized securities exchanges where available (Level 1). If quoted prices are not available, fair values are measured by utilizing matrix pricing, which is a mathematical technique used widely in the industry to value debt securities without relying exclusively on quoted prices for specific securities but rather by relying on the securities' relationship to other benchmark quoted securities (Level 2). Management made no adjustment to the fair value quotes that were received from the independent third party pricing service. Level 3 securities are assets whose fair value cannot be determined by using observable measures, such as market prices or pricing models. Level 3 assets are typically very illiquid, and fair values can only be calculated using estimates or risk-adjusted value ranges. Management applies known factors, such as currently applicable discount rates, to the valuation of those investments in order to determine fair value at the reporting date.

The Company holds one corporate investment security with an amortized historical cost of \$2.6 million and an aggregate fair market value of \$2.7 million as of June 30, 2020. This security has a valuation that is determined using published net asset values (NAV) derived by an analysis of the security's underlying assets. This security is comprised primarily of broadly-diversified real estate and adjustable-rate senior secured business loans and are traded in secondary markets on an infrequent basis. While these securities are redeemable at least annually through tender offers made by their respective issuers, the liquidation value of the securities may be below their stated NAVs and also subject to restrictions as to the amount of securities that can be redeemed at any single scheduled redemption. The Company anticipates that these securities will be redeemed by their respective issuers on indeterminate future dates as a consequence of the ultimate liquidation strategies employed by the management of these investments.

The Company holds two equity security investments, with an aggregate value of \$1.6 million at June 30, 2020, valued utilizing readily available market pricing (Level 1) observed from active trading on major national stock exchanges.

Interest rate derivatives: The fair value of the interest rate derivatives, characterized as either fair value or cash flow hedges, are calculated based on a discounted cash flow model. All future floating rate cash flows are projected and both floating rate and fixed rate cash flows are discounted to the valuation date. The benchmark interest rate curve utilized for projecting cash flows and applying appropriate discount rates is built by obtaining publicly available third party market quotes for various swap maturity terms.

Impaired loans: Impaired loans are those loans in which the Company has measured impairment based on the fair value of the loan's collateral or the discounted value of expected future cash flows. Fair value is generally determined based upon market value evaluations by third parties of the properties and/or estimates by management of working capital collateral or discounted cash flows based upon expected proceeds. These appraisals may include up to three approaches to value: the sales comparison approach, the income approach (for income-producing property), and the cost approach. Management modifies the appraised values, if needed, to take into account recent developments in the market or other factors, such as, changes in absorption rates or market conditions from the time of valuation and anticipated sales values considering management's plans for disposition. Such modifications to the appraised values could result in lower valuations of such collateral. Estimated costs to sell are based on current amounts of disposal costs for similar assets. These measurements are classified as Level 3 within the valuation hierarchy. Impaired loans are subject to nonrecurring fair value adjustment upon initial recognition or subsequent impairment. A portion of the allowance for loan losses is allocated to impaired loans if the value of such loans is deemed to be less than the unpaid balance.

Foreclosed real estate: Fair values for foreclosed real estate are initially recorded based on market value evaluations by third parties, less costs to sell ("initial cost basis"). Any write-downs required when the related loan receivable is exchanged for the underlying real estate collateral at the time of transfer to foreclosed real estate are charged to the allowance for loan losses. Values are derived from appraisals, similar to impaired loans, of underlying collateral or discounted cash flow analysis. Subsequent to foreclosure, valuations are updated periodically and assets are marked to current fair value, not to exceed the initial cost basis. In the determination of fair value subsequent to foreclosure, management also considers other factors or recent developments, such as, changes in absorption rates and market conditions from the time of valuation and anticipated sales values considering management's plans for disposition. Either change could result in adjustment to lower the property value estimates indicated in the appraisals. These measurements are classified as Level 3 within the fair value hierarchy.

The following tables summarize assets measured at fair value on a recurring basis as of the indicated dates, segregated by the level of valuation inputs within the hierarchy utilized to measure fair value:

	June 30, 2020					
(In thousands)	Level 1	Level 2	Level 3	Total Fair Value		
Available-for-Sale Portfolio						
Debt investment securities:						
US Treasury, agencies and GSEs	\$ —	\$ 21,562	\$ —	\$ 21,562		
State and political subdivisions		13,141	_	13,141		
Corporate	_	8,542	_	8,542		
Asset backed securities		12,801	_	12,801		
Residential mortgage-backed – US agency	_	15,124	_	15,124		
Collateralized mortgage obligations – US agency		24,881	_	24,881		
Collateralized mortgage obligations – Private label	_	17,180	_	17,180		
Total		113,231		113,231		
Corporate measured at NAV	_	_	_	2,694		
Total available-for-sale securities	\$ —	\$113,231	\$ —	\$115,925		
Marketable equity securities	\$1,564	<u>\$</u>	<u>\$ —</u>	\$ 1,564		
Interest rate swap derivative fair value hedge	\$ —	\$ (149)	\$ —	\$ (149)		
Interest rate swap derivative cash flow hedges	\$ —	\$ (1,528)	\$ —	\$ (1,528)		

(In thousands)	Level 1	Level 2	Level 3	Total Fair Value
State and political subdivisions		1,736		1,736
Corporate	_	7,631	_	7,631
Asset backed securities	_	13,232	_	13,232
Residential mortgage-backed – US agency	_	18,980	_	18,980
Collateralized mortgage obligations – US agency	_	30,785	_	30,785
Collateralized mortgage obligations – Private label		16,821		16,821
Total	_	106,005	_	106,005
Corporate measured at NAV	_	_	_	4,923
Total available-for-sale securities	\$ —	\$106,005	\$ —	\$110,928
Marketable equity securities	<u>\$ —</u> \$ —	\$ 534	\$ —	\$ 534
Interest rate swap derivative fair value hedge	<u>\$ —</u>	\$ (92)	<u>\$ —</u>	\$ (92)

Pathfinder Bank had the following assets measured at fair value on a nonrecurring basis as of June 30, 2020 and December 31, 2019:

	June 30, 2020					
(I., 4b J.)	T 14		r 10	Total		
(In thousands)	<u>Level 1</u>	Level 2	Level 3	Fair Value		
Impaired loans	\$ —	\$ —	\$ 589	\$ 589		
Foreclosed real estate	\$ —	\$ —	\$ 26	\$ 26		
		December 31, 2019				
				Total		
(In thousands)	Level 1	Level 2	Level 3	Fair Value		
Impaired loans	\$ —	\$ —	\$3,105	\$ 3,105		

The following table presents additional quantitative information about assets measured at fair value on a nonrecurring basis and for which Level 3 inputs were used to determine fair value at the indicated dates.

	Quantitative Information about Level 3 Fair Value Measurements									
	Valuation Techniques	Unobservable Input	Range (Weighted Avg.)							
At June 30, 2020										
Impaired loans	Appraisal of collateral	Appraisal Adjustments	5% – 25% (10%)							
	(Sales Approach)	Costs to Sell	7% – 13% (11%)							
	Discounted Cash Flow									
Foreclosed real estate	Appraisal of collateral	Appraisal Adjustments	15% – 15% (15%)							
	(Sales Approach)	Costs to Sell	6% – 9% (8%)							
	Quantitative Info	Quantitative Information about Level 3 Fair Value Measurements								
	Valuation Techniques	Unobservable Input	Range (Weighted Avg.)							
At December 31, 2019										
Impaired loans	Appraisal of collateral	Appraisal Adjustments	5% – 20% (9%)							
	(Sales Approach)	Costs to Sell	7% – 13% (11%)							
	Discounted Cash Flow									

The Company's two equity security investments, with fair values determined using Level 1 inputs at June 30, 2020 were restructured and consequently listed on major national stock exchanges in the second quarter of 2020.

The fair value of one of the investments was \$918,000 at June 30, 2020 and its fair values, determined using NAV methodologies, at March 31, 2020 and December 31, 2019 were \$2.1 million and \$2.1 million, respectively. The fair value of the other investment was \$645,000 at June 30, 2020 and its fair values, determined using Level 2 inputs, at March 31, 2020 and December 31, 2019 were \$340,000 and \$534,000, respectively.

Required disclosures include fair value information of financial instruments, whether or not recognized in the consolidated statement of condition, for which it is practicable to estimate that value. In cases where quoted market prices are not available, fair values are based on estimates using present value or other valuation techniques. Those techniques are significantly affected by the assumptions used, including the discount rate and estimates of future cash flows. In that regard, the derived fair value estimates cannot be substantiated by comparison to independent markets and, in many cases, could not be realized in immediate settlement of the instrument.

The Company has various processes and controls in place to ensure that fair value is reasonably estimated. The Company performs due diligence procedures over third-party pricing service providers in order to support their use in the valuation process.

While the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

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

FASB ASC Topic 820 for Fair Value Measurements and Disclosures, the financial assets and liabilities were valued at a price that represents the Company's exit price or the price at which these instruments would be sold or transferred.

The following information should not be interpreted as an estimate of the fair value of the entire Company since a fair value calculation is only provided for a limited portion of the Company's assets and liabilities. Due to a wide range of valuation techniques and the degree of subjectivity used in making the estimates, comparisons between the Company's disclosures and those of other companies may not be meaningful. The Company, in estimating its fair value disclosures for financial instruments, used the following methods and assumptions:

Cash and cash equivalents – The carrying amounts of these assets approximate their fair value and are classified as Level 1.

Federal Home Loan Bank stock – The carrying amount of these assets approximates their fair value and are classified as Level 2.

Net loans – For variable-rate loans that re-price frequently, fair value is based on carrying amounts. The fair value of other loans (for example, fixed-rate commercial real estate loans, mortgage loans, and commercial and industrial loans) is estimated using discounted cash flow analysis, based on interest rates currently being offered in the market for loans with similar terms to borrowers of similar credit quality. Loan value estimates include judgments based on expected prepayment rates. The measurement of the fair value of loans, including impaired loans, is classified within Level 3 of the fair value hierarchy.

Accrued interest receivable and payable – The carrying amount of these assets approximates their fair value and are classified as Level 1.

Deposits – The fair values disclosed for demand deposits (e.g., interest-bearing and noninterest-bearing checking, passbook savings and certain types of money management accounts) are, by definition, equal to the amount payable on demand at the reporting date (i.e., their carrying amounts) and are classified within Level 1 of the fair value hierarchy. Fair values for fixed-rate certificates of deposit are estimated using a discounted cash flow calculation that applies interest rates currently being offered in the market on certificates of deposits to a schedule of aggregated expected monthly maturities on time deposits. Measurements of the fair value of time deposits are classified within Level 2 of the fair value hierarchy.

Borrowings – Fixed/variable term "bullet" structures are valued using a replacement cost of funds approach. These borrowings are discounted to the FHLBNY advance curve. Option structured borrowings' fair values are determined by the FHLB for borrowings that include a call or conversion option. If market pricing is not available from this source, current market indications from the FHLBNY are obtained and the borrowings are discounted to the FHLBNY advance curve less an appropriate spread to adjust for the option. These measurements are classified as Level 2 within the fair value hierarchy.

Subordinated loans – The Company secures quotes from its pricing service based on a discounted cash flow methodology or utilizes observations of recent highly-similar transactions which result in a Level 2 classification.

The carrying amounts and fair values of the Company's financial instruments as of the indicated dates are presented in the following table:

		June 30	0, 2020	Decembe	r 31, 2019
(In thousands)	Fair Value	Carrying	Estimated	Carrying	Estimated
Financial assets:	<u>Hierarchy</u>	Amounts	Fair Values	Amounts	Fair Values
Cash and cash equivalents	1	\$ 45,123	\$ 45,123	\$ 20,160	\$ 20,160
Investment securities – available-for-sale	2	113,231	113,231	106,005	106,005
Investment securities – available-for-sale	NAV	2,694	2,694	4,923	4,923
Investment securities – marketable equity	1	1,564	1,564	_	_
Investment securities – marketable equity	2	_	_	534	534
Investment securities – held-to-maturity	2	141,298	143,140	122,988	124,148
Federal Home Loan Bank stock	2	4,091	4,091	4,834	4,834
Net loans	3	795,456	798,815	772,782	767,654
Accrued interest receivable	1	4,973	4,973	3,712	3,712
Financial liabilities:					
Demand Deposits, Savings, NOW and MMDA	1	\$560,273	\$560,273	\$460,293	\$460,293
Time Deposits	2	410,320	413,167	421,600	422,409
Borrowings	2	75,397	78,088	93,125	93,643
Subordinated loans	2	15,145	14,379	15,128	14,921
Accrued interest payable	1	276	276	396	396
Interest rate swap derivative fair value hedge	2	149	149	92	92
Interest rate swap derivative cash flow hedges	2	1,528	1,528	_	_

Note 11: Interest Rate Derivatives

The Company is exposed to certain risks from both its business operations and changes in economic conditions. As part of managing interest rate risk, the Company enters into standardized interest rate derivative contracts (designated as hedging agreements) to modify the repricing characteristics of certain portions of the Company's portfolios of earning assets and interest-bearing liabilities. The Company designates interest rate hedging

agreements utilized in the management of interest rate risk as either fair value hedges or cash flow hedges. Interest rate hedging agreements are generally entered into with counterparties that meet established credit standards and the agreements contain master netting, collateral and/or settlement provisions protecting the at-risk party. Based on adherence to the Company's credit standards and the presence of the netting, collateral or settlement provisions, the Company believes that the credit risk inherent in these contracts was not material at June 30, 2020. Interest rate hedging agreements are recorded at fair value as other assets or liabilities. The Company had no derivative contracts not designated as hedging agreements at June 30, 2020 or December 31, 2019.

As a result of interest rate fluctuations, fixed-rate assets and liabilities will appreciate or depreciate in fair value. When effectively hedged, this appreciation or depreciation will generally be offset by fluctuations in the fair value of derivative instruments that are linked to the hedged assets and liabilities. This strategy is referred to as a fair value hedge. In a fair value hedge, the fair value of the derivative (the interest rate hedging agreement) and changes in the fair value of the hedged item are recorded in the Company's consolidated balance sheet with the corresponding gain or loss recognized in current earnings. The difference between changes in the fair value of the interest rate hedging agreements and the hedged items represents hedge ineffectiveness and is recorded as an adjustment to the interest income or interest expense of the respective hedged item.

Cash flows related to floating rate assets and liabilities will fluctuate with changes in the underlying rate index. When effectively hedged, the increases or decreases in cash flows related to the floating-rate asset or liability will generally be offset by changes in cash flows of the derivative instruments designated as a hedge. This strategy is referred to as a cash flow hedge. In a cash flow hedge, the effective portion of the derivative's gain or loss is initially reported as a component of other comprehensive income and subsequently reclassified into earnings when the forecasted transaction affects earnings. The ineffective portion of the derivative's gain or loss on cash flow hedges is accounted for similar to that associated with fair value hedges.

Among the array of interest rate hedging contracts, potentially available to the Company, are interest rate swap and interest rate cap (or floor) contracts. The Company uses interest rate swaps, cap or floor contracts as part of its interest rate risk management strategy. Interest rate swaps involve the receipt of variable amounts from a counterparty in exchange for the Company making fixed payments over the life of the agreements without the exchange of the underlying notional amount. An interest rate cap is a type of interest rate derivative in which the buyer receives payments at the end of each contractual period in which the index interest rate exceeds the contractually agreed upon strike price rate. The purchaser of a cap contract will continue to benefit from any rise in interest rates above the strike price. Similarly an interest rate floor is a derivative contract in which the buyer receives payments at the end of each period in which the interest rate is below the agreed strike price. The purchaser of a floor contract will continue to benefit from any rise in interest rates above the strike price.

The Company entered into a pay-fixed/receive variable interest rate swap with a notional amount of \$9.2 million in April 2019, which was designated as a fair value hedge, associated with specific pools within the Company's fixed-rate consumer loan portfolio. The swap contract will be in force from April 2019 to April 2021 and the Company will be required to pay 2.39% to the swap counterparty, while receiving 3-month LIBOR indexed payments from the same counterparty, with both payments calculated on the notional amount.

As of June 30, 2020 and December 31, 2019, the following amounts were recorded on the balance sheet related to the cumulative basis adjustments for fair value hedges:

(In thousands) Line item on the balance sheet in	the He	Cumulative Amount of Fair Value Hedging Adjustment Included in The Carrying ng Amount of Amount of the Hedged dged Assets at E 30, 2020 Assets at June 30, 2020		the Hec	ng Amount of Iged Assets at Iber 31, 2019	Fair Vali Adjustmer The Carry of the He	we Amount of ue Hedging nt Included in ying Amount edged Assets iber 31, 2019	
which the hedged item is included:								
Loans receivable (1)	\$	16,428	\$	149	\$	19,254	\$	75

(1) These amounts include the amortized cost basis of the hedged portfolio used to designate the hedging relationship in which the hedged item is the remaining amortized cost of the last layer expected to be remaining at the end of the hedging contract term. At June 30, 2020 and December 31, 2019, the amortized cost of the basis of the closed portfolio used in the hedging relationship was \$16.4 million and \$19.3 million, the cumulative basis adjustment associated with the hedging relationship was \$149,000 and \$75,000, and the amount of the designated hedged item was \$9.2 million and \$9.2 million, respectively.

At June 30, 2020 and December 31, 2019, the fair value of the fair value derivative resulted in a net liability position of \$157,000 and \$92,000 under the agreement, respectively, recorded by the Company in other liabilities. The Company's participation in the swap contract reduced total loan interest income, recognized in consolidated earnings, by \$72,000 and \$88,000 for three and six months ended June 30, 2020, respectively.

In February 2020, the Company entered into an interest rate cap contract in the notional amount of \$40.0 million, intended to reduce the Company's exposure to potential rising interest rates. This contractual agreement has been designated as a cash flow hedge with changes in the fair value of the contract, net of changes in the fair value of the designated hedged liability (certain short-term certificates of deposit with rates of interest that are highly correlated to the 3-month LIBOR index) being accounted for through other comprehensive income. The term of the cap contract commenced on May 1, 2020 and expire on May 1, 2023. The Company paid \$228,000 in a one-time premium for the cap contract and has no further contractual obligations to the counterparty over the three-year life of the contract. The premium will be amortized ratably over the contractual term of the cap contract with an annual average cost to the Company of approximately 19 basis points relative to the notional amount. The Company will potentially benefit during the term of this cap contract, in the manner described above, for the period of time that the 3-month LIBOR index exceeds 1.85% (the strike price). The cap contract had no effect on recorded interest expense in the three or six months ended June 30, 2020.

In March 2020, the Company entered into an interest rate swap contract in the notional amount of \$40.0 million, intended to reduce the Company's exposure to potential rising interest rates. This contractual agreement has been designated as a cash flow hedge with changes in the fair value of the contract, net of changes in the fair value of the designated hedged liability (certain short-term certificates of deposit with rates of interest that are highly correlated to the 3-month LIBOR index) being accounted for through other comprehensive income. The term of the swap contract commenced on May 15, 2020 and expire on May 15, 2023. Under the terms of the swap contract, the Company will be obligated to pay the contractual counterparty an annual rate of 1.39% (the strike price) times the notional amount of the contract. Simultaneously, for the duration of the swap contract, the counterparty will be obligated to pay the Company the annual rate of the 3-month LIBOR index, as determined each calendar quarter, times the notional contractual amount. The swap contract had no effect on recorded interest expense in the three or six months ended June 30, 2020.

(In thousands)	June 30, 2020	December 31, 2019
Cash flow hedges:		
Total unamortized premium	\$ 224	\$ —
Fair market value adjustment interest rate cap	(199)	_
Total unamortized cap	25	
Fair market value adjustment interest rate swap	(1,329)	_
Total loss in comprehensive income	\$(1,528)	<u>\$</u>

The amounts of hedge ineffectiveness, recognized during the quarter ended June 30, 2020, for cash flow hedges were not material to the Company's consolidated results of operations. The Company had no hedged positions at June 30, 2019. Some or the entire amount included in accumulated other comprehensive loss would be reclassified into current earnings should a portion of, or the entire hedge no longer be considered effective, but at this time, management expects the hedge to remain fully effective during the remaining term of the swap. The changes in the fair values of the interest rate hedging agreements and the hedged items primarily result from the effects of changing interest rates and spreads.

The Company manages its potential credit exposure on interest rate swap transactions by entering into a bilateral credit support agreements with each counterparty. These agreements require collateralization of credit exposures beyond specified minimum threshold amounts. The Company posted cash in escrow of \$1.6 million under collateral arrangements to satisfy collateral requirements associated with the interest rate swap contract at June 30, 2020.

	For the		For the six	For the six months		
	months	s ended	ende	ended		
	June 30,	June 30,	June 30,	June 30,		
(In thousands)	2020	2019	2020	2019		
Balance as of December 31:	\$ —	\$ —	\$ —	\$ —		
Amount of losses recognized in other comprehensive income	(184)		(1,528)			
Losses in other comprehensive income:	\$ (184)	<u>\$ —</u>	\$(1,528)	\$ —		

Note 12: Accumulated Other Comprehensive Income (Loss)

Changes in the components of accumulated other comprehensive income (loss) ("AOCI"), net of tax, for the periods indicated are summarized in the tables below.

		For the three months ended June 30, 2020							
(In thousands)	Retirement Plans	and L Availa	zed Gains osses on able-for- ecurities	Unrealiz Losses Derivati and Hedg Activiti	on c ves T ging	nrealized Loss on Securities ransferred to Held-to- Maturity	Total		
Beginning balance	\$ (2,859)	\$	(3,121)	\$ (1,0)62) \$	(35)	\$(7,077)		
Other comprehensive income before reclassifications			3,470	(1	45)	8	3,333		
Amounts reclassified from AOCI	47		(690)	-		_	(643)		
Ending balance	\$ (2,812)	\$	(341)	\$ (1,2	207) \$	(27)	\$(4,387)		
				For the three n	nonths ended Ju	ne 30. 2019			
		Retiren		Unrealized Ga and Losses of Available-for	Un ins o n Tı	realized Loss n Securities ransferred to Held-to-			
(In thousands)		Plan		Sale Securitie		Maturity	Total		
Beginning balance		\$ (3,0	087)	\$ (1,3)		(53)	\$(4,462)		
Other comprehensive income before reclassifications		-	_	1,3	90	7	1,397		
Amounts reclassified from AOCI			66	(<u></u>		41		
Ending balance		\$ (3,0)21)	\$	43 \$	(46)	<u>\$(3,024)</u>		
	-		For the		ed June 30, 2020				
	Retirement	and I	ized Gains Losses on lable-for-	Unreali Losses Derivati and Hed	on conves T	nrealized Loss on Securities Transferred to Held-to-			
(In thousands)	Plans		Securities	Activit		Maturity	Total		
Beginning balance	\$ (2,717)	\$	(216)	\$ -	_ \$	(38)	\$(2,971)		
Reevaluation of deferred tax asset valuation allowance (1)	(188)		(15)	-	_	(3)	(206)		
Other comprehensive income before reclassifications	_		600	(1,2	207)	14	(593)		
Amounts reclassified from AOCI	93		(710)				(617)		
Ending balance	\$ (2,812)	\$	(341)	\$ (1,2	207) \$	(27)	\$(4,387)		

⁽¹⁾ Management determined that the Company, under the current New York State ("NYS") tax code, was highly unlikely to incur a material NYS tax liability in the foreseeable future. As a result, certain net current and deferred tax assets, related to GAAP vs. tax timing differences under previous NYS tax law were no longer going to provide any future tax benefit. The substantial majority of these net deferred tax assets were offset by a related valuation allowance established in prior periods. Therefore, the Company eliminated its remaining NYS net deferred tax asset balances and the related valuation allowance on January 1, 2020. The effect of these eliminations required an adjustment to other comprehensive income balances and had no effect on 2020 reported earnings.

), 2019					
	Retirement	and L Avail	zed Gains osses on able-for-	on Se Trans He	ized Loss ecurities ferred to ld-to-	_
(In thousands)	Plans	Sale S	ecurities	Maturity		Total
Beginning balance	\$ (3,152)	\$	(2,832)	\$	(58)	\$(6,042)
Other comprehensive income before reclassifications	_		2,963		12	2,975
Amounts reclassified from AOCI	131		(88)		_	43
Ending balance	\$ (3,021)	\$	43	\$	(46)	\$(3,024)

The following table presents the amounts reclassified out of each component of AOCI for the indicated period:

(In thousands) Details about AOCI (1) components Retirement plan items	June	from A0 (Unau For the months 2 30,	OCI (dited) three ende Jur	1)	Affected Line Item in the Statement of Income	Ju	Amount Refrom Ar from Ar (Unau For the months and 30, 2020	OCI dited he six s ende Ju	(1) l)
Retirement plan net losses recognized in plan									
expenses (2)	\$	(59)	\$	(84)	Salaries and employee benefits	\$	(117)	\$	(168)
Tax effect		12		18	Provision for income taxes		24		37
	\$	(47)	\$	(66)	Net Income	\$	(93)	\$	(131)
Available-for-sale securities									
					Net gains on sales and redemptions of investment				
Realized gain on sale of securities	\$	873	\$	32	securities	\$	899	\$	111
Tax effect	(183)		(7)	Provision for income taxes		(189)		(23)
	\$	690	\$	25	Net Income	\$	710	\$	88

⁽¹⁾ Amounts in parentheses indicates debits in net income.

See Note 5 for additional information.

⁽²⁾ These items are included in net periodic pension cost.

Note 13: Noninterest Income

The Company has included the following table regarding the Company's noninterest income for the periods presented.

	For the three months ended June 30,		For the si ended J	
(In thousands)	2020	2019	2020	2019
Service fees	d 440	Φ 050	d 400	d 400
Insufficient funds fees	\$ 148	\$ 272	\$ 423	\$ 480
Deposit related fees	117	53	172	105
ATM fees	38	23	64	45
Total service fees	303	348	659	630
Fee Income				
Insurance commissions	184	216	519	451
Investment services revenue	81	97	149	145
ATM fees surcharge	56	59	109	105
Banking house rents collected	71	33	142	68
Total fee income	392	405	919	769
Card income				
Debit card interchange fees	205	187	368	331
Merchant card fees	15	22	31	38
Total card income	220	209	399	369
Mortgage fee income and realized gain on sale of loans and foreclosed real estate				
Loan servicing fees	79	60	128	87
Net gain on sales of loans and foreclosed real estate	97	13	769	5
Total mortgage fee income and realized gain on sale of loans and foreclosed real estate	176	73	897	92
Total	1,091	1,035	2,874	1,860
Earnings and gain on bank owned life insurance	106	101	222	222
Net gains on sales and redemptions of investment securities	1,023	32	1,049	111
(Losses)/gains on marketable equity securities	(722)	16	(916)	57
Other miscellaneous income	33	35	50	62
Total noninterest income	\$1,531	\$1,219	\$3,279	\$2,312

The following is a discussion of key revenues within the scope of the new revenue guidance:

- Service fees Revenue is earned through insufficient funds fees, customer initiated activities or passage of time for deposit related fees, and ATM service fees. Transaction-based fees are recognized at the time the transaction is executed, which is the same time the Company's performance obligation is satisfied. Account maintenance fees are earned over the course of the month as the monthly maintenance performance obligation to the customer is satisfied.
- Fee income Revenue is earned through commissions on insurance and securities sales, ATM surcharge fees, and banking house rents collected. The Company earns investment advisory fee income by providing investment management services to customers under investment management contracts. As the direction of investment management accounts is provided over time, the performance obligation to investment management customers is satisfied over time, and therefore, revenue is recognized over time.

- *Card income* Card income consists of interchange fees from consumer debit card networks and other related services. Interchange rates are set by the card networks. Interchange fees are based on purchase volumes and other factors and are recognized as transactions occur.
- Mortgage fee income and realized gain on sale of loans and foreclosed real estate Revenue from mortgage fee income and realized gain on sale of loans and foreclosed real estate is earned through the origination of residential and commercial mortgage loans, sales of one-to-four family residential mortgage loans, sales of government guarantees portions of SBA loans, and sales of foreclosed real estate, and is earned as the transaction occurs.

Note 14: Leases

The Company has operating and finance leases for certain banking offices and land under noncancelable agreements. Our leases have remaining lease terms that vary from less than one year up to 31 years, some of which include options to extend the leases for various renewal periods. All options to renew are included in the current lease term when we believe it is reasonably certain that the renewal options will be exercised.

The components of the lease expense are as follows:

	For the	For the three months ended		For the six months ended	
	month				
	June 30,	June 30,	June 30,	June 30,	
(In thousands)	2020	2019	2020	2019	
Operating lease cost	\$ 60	\$ 60	\$ 121	\$ 119	
Finance lease cost	20	12	40	12	

		ie three s ended	For the six months ended	
(In thousands)	June 30, 2020	June 30, 2019	June 30, 2020	June 30, 2019
Cash paid for amount included in the measurement of lease liabilities:				
Operating cash flows from operating leases	\$ 55	\$ 56	\$ 111	\$ 104
Operating cash flows from finance leases	20	12	40	12
Financing cash flows from finance leases	17	11	35	11

Supplemental balance sheet information related to leases was as follows:

	June 30,			December 31,	
(In thousands, except lease term and discount rate)	2020			2019	
Operating Leases:					
Operating lease right-of-use assets	\$	2,312	\$	2,386	
Operating lease liabilities	\$	2,587	\$	2,650	
Finance Leases:					
Financial Liability	\$	583	\$	578	
Weighted Average Remaining Lease Term:					
Operating Leases	19.	19.33 years		19.58 years	
Finance Leases	28.	28.92 years		29.42 years	
Weighted Average Discount Rate:					
Operating Leases		3.72%		3.71%	
Finance Leases		13.75%		13.75%	

Maturities of lease liabilities were as follows:

Twelve Months Ending June 30,	
(In thousands)	
2021	\$ 110
2022	95
2023	105
2024	114
2025	122
Thereafter	2,624
Total minimum lease payments	\$3,170

The Company owns certain properties that it leases to unaffiliated third parties at market rates. Lease rental income was \$71,000 and \$34,000 for the three months ended June 30, 2020 and 2019, respectively. Lease rental income was \$142,000 and \$68,000 for the six months ended June 30, 2020 and 2019, respectively. All lease agreements, in which the Company is the lessor, are accounted for as operating leases.

Note 15: COVID-19

In early January 2020, the World Health Organization issued an alert that a novel coronavirus outbreak was emanating from Wuhan, Hubei Province in China. Over the course of the next several weeks, the outbreak continued to spread to various regions of the world prompting the World Health Organization to declare COVID-19 a global pandemic on March 11, 2020. In the United States, by the end of March 2020, the rapid spread of the COVID-19 virus invoked various Federal and New York State authorities to make emergency declarations and issue executive orders to limit the spread of the disease. Measures included restrictions on international and domestic travel, limitations on public gatherings, implementation of social distancing and sanitization protocols, school closings, orders to shelter in place and mandates to close all non-essential businesses to the public. To widely varying degrees, largely dependent upon the level of local and regional outbreaks and the resultant levels of strain on locally-available medical resources, these very substantial curtailments of social and economic activity have been relaxed globally and in the United States. However, there is virtually no locality within the United States that has returned to substantively normal business and social activities at the time of this filing and the spread rate of the coronavirus remains extremely high in many regions of the country.

As a result of the initial and continuing outbreak, and governmental response thereto, the spread of the coronavirus has caused us to modify our business practices, including employee travel, employee work locations, and cancellation of physical participation in meetings, events and conferences. The Company has many employees working remotely and has significantly reduced physical customer contact with employees and other customers by limiting branch activities. Initially, branch activities were limited to drive-thru transactions whenever possible, teleconferencing and in-branch "appointments only" services. The Bank's branches are now fully accessible to the public but remain in strict compliance with all applicable social distancing and sanitization guidelines. Since the start of the pandemic, transactional volume has also increased through the Bank's telephone and internet banking channels. We will take further actions for safety as may be required by government authorities or that we determine to be in the best interests of our employees, customers and business partners.

Concerns about the spread of the disease and its anticipated negative impact on economic activity, severely disrupted both domestic and international financial markets prompting the world's central banks to inject significant amounts of monetary stimulus into their respective economies. In the United States, the Federal Reserve System's Federal Open Market Committee, swiftly cut the target Federal Funds rate to a range of 0% to 0.25%, including a 50 basis point reduction in the target federal funds rate on March 3, 2020 and an additional 100 basis point reduction on March 15, 2020. In addition, the Federal Reserve initiated various market support

programs to ease the stress on financial markets. This significant reduction in short-term interest rates has reduced, and will continue to reduce, the Bank's cost of funds and interest earning-asset yields. The long-term effects of the current interest rate environment, that has resulted from government and central bank responses to the pandemic, on the Bank's net interest margins cannot be predicted with certainty at this time.

The Coronavirus Aid, Relief, and Economic Security Act ("CARES Act"), signed into law on March 27, 2020, provides financial assistance in various forms to both businesses and consumers. In addition, the CARES Act also created many directives affecting the operations of financial services providers, such as the Company, including a forbearance program for federally-backed mortgage loans and protections for borrowers from negative credit reporting due to loan accommodations related to the national emergency. The banking regulatory agencies have likewise issued guidance encouraging financial institutions to work prudently with borrowers who are, or may be, unable to meet their contractual payment obligations because of the effects of COVID-19. The Company has worked to assist its business and individual customers affected by COVID-19. Through June 30, 2020, the Bank granted payment deferral requests primarily for 90 days, on 556 loans representing approximately \$145.6 million of existing loan balances.

Borrowers that were delinquent in their payments to the Bank, prior to requesting a COVID-19 related financial hardship payment deferral were reviewed on a case by case basis for troubled debt restructure classification and non-performing loan status. In the instances where the Company granted a payment deferral to a delinquent borrower because of COVID-19, the borrower's delinquency status was frozen as of February 29, 2020, and their loans will continue to be reported as delinquent during the deferment period based on their delinquency status as of that date. The Company anticipates that the number and amount of COVID-19 financial hardship payment deferral requests will continue to remain elevated in the second half of 2020 and, possibly, significantly longer. The long-term collectability of deferred loan payments will depend on many factors, including the future progression of the pandemic, potential medical breakthroughs in therapeutic treatments and/or vaccines, further economic stimulus from government authorities, the rate at which governmental restrictions on business activities are relaxed and the adequacy and sustainability of other sources of repayment such as loan collateral. Consistent with industry regulatory guidance, borrowers that were granted COVID-19 related deferrals but were otherwise current on loan payments will continue to have their loans reported as current loans during the agreed upon deferral period, accrue interest and not be accounted for as troubled debt restructurings.

The future performance of the Company's loan portfolios with respect to credit losses will be highly dependent upon the course and duration, both nationally and within the Company's market area, of the public health and economic factors related to the pandemic, as well as the concentrations in the Company's loan portfolio. Concentrations of loans within a portfolio that are made to a singular borrower, to a related groups of borrowers, or to a limited number of industries, are generally considered to be additional risk factors in estimating future credit losses. Therefore, the Company monitors all of its credit relationships to ensure that the total loan amounts extended to one borrower, or to a related group of borrowers, does not exceed the maximum permissible levels defined by applicable regulation or the Company's generally more restrictive internal policy limits.

Loans to a single borrower, or to a related group of borrowers, are referred to as total related credits. Total related credits encompass all related or affiliated borrower loan balances, including available unused lines of credit, for both personal and business loans. At June 30, 2020, the Company had 26 total related credit relationships, comprised of 210 individual loans, with outstanding balances in excess of \$5.0 million. These total related credits ranged from \$5.0 million to \$13.2 million at June 30, 2020 with aggregate balances of \$207.2 million. Of the \$207.2 million in total related credits, \$189.8 million was secured by various collateral assets, primarily commercial real estate, \$11.3 million was unsecured, and \$6.1 million were PPP loans.

In addition, the future credit-related performance of a loan portfolio generally depends upon the types of loans within the portfolio, concentrations by type of loan and the quality of the collateral securing the loans. The following table details the Company's loan portfolio by collateral type within major categories as of June 30, 2020:

(Dollars in thousands)	Balance	Number of Loans	Average Loan Balance	M	inimum/ aximum n Balance	Allowai for Los Losse	ın Total
Residential Mortgage Loans	\$216,419	2,101	\$ 103	\$ 1	— \$ 1,5	66 \$ 7	56 27%
Commercial Real Estate:							
Mixed Use	\$ 41,179	50	\$ 824	\$ 26	 \$ 7,43	33 \$ 6	72 5%
Multi-Family Residential	39,952	57	701	27	- 6,0	09 6	52 5%
Hotels and Motels	33,258	10	3,326	226	— 11,5		43 4%
Office	32,035	58	552	12	- 4,9		23 4%
Retail	22,720	52	437	1	— 5,2	17 3	71 3%
1-4 Family Residential	18,433	146	126	10	— 1,2	50 3	01 2%
Automobile Dealership	16,497	10	1,650	173	- 6,6		69 2%
Recreation/Golf Course/Marina	10,812	14	772	32	— 3,1	50 1	77 1%
Warehouse	10,790	15	719	8	— 2,6	78 1	76 1%
Manufacturing/Industrial	6,625	15	442	3	— 1,4	38 1	08 1%
Restaurant	6,346	25	254	10	— 1,3		04 1%
Automobile Repair	4,829	10	483	61	— 2,3		79 1%
Not-For-Profit & Community Service Real Estate	3,378	3	1,126	109	— 1,6		55 0%
Land	3,418	5	684	76	- 2,0	00	56 0%
Skilled Nursing Facility	3,503	1	3,503	3,503	- 3,5		57 1%
All Other	7,049	36	196	17			15 1%
Total Commercial Real Estate Loans	\$260,824	507	\$ 514			\$ 4,2	
Commercial and Industrial:							
Secured Term Loans	\$ 63,672	360	\$ 177	\$ 0	 \$ 6,0	35 \$ 1,5	25 8%
Unsecured Term Loans	19,494	131	149	0	— 1,6	47 4	67 3%
Secured Lines of Credit	42,370	288	147	0	— 5,0	00 1,0	15 5%
Unsecured Lines of Credit	11,140	143	78	0	— 2,9	99 2	67 1%
Total Commercial and Industrial Loans	\$136,676	922	\$ 148		<u> </u>	\$ 3,2	74 17%
Tax Exempt Loans	\$ 7,644	24	\$ 319	\$ 9	\$ 2,4	25 \$	1 1%
Paycheck Protection Loans	\$ 73,774	641	\$ 115	\$ 1	- \$ 3,0	00 \$ -	- 9%
Consumer:							
Home Equity Lines of Credit	\$ 42,587	1,077	\$ 40	\$ 0	— \$ 4	17 \$ 6	44 5%
Automobile	31,569	1,994	16	1	•	* -	76 4%
Consumer Secured	4,302	82	52	23			65 1%
Consumer Unsecured	32,075	6,539	5	1	_		84 4%
All Others	1,969	1,002	2	0			30 0%
Total Consumer Loans	\$112,502	10,694	\$ 11			\$ 1,6	
Net deferred loan fees	(1,830)	_	_		_		
Unallocated allowance for loan losses	_	_	_		_	- 5	65 —
Total Loans	\$806,009	14,889	\$ 54			\$ 10,5	53 100%

Including the potential effects of the COVID-19 outbreak on the Company's loan portfolios, the ongoing and dynamic nature of the pandemic and the resultant, potentially severe and long-lasting, economic dislocations, it is difficult to predict the full impact of the COVID-19 outbreak on our business. The extent of such impact will depend on future developments, which are highly uncertain, including when the coronavirus can be controlled and abated and when and how the economy may be reopened. As the result of the COVID-19 pandemic and the related adverse local and national economic consequences, we could be subject to any of the following risks, any of which could have a material, adverse effect on our business, financial condition, liquidity, and results of operations:

- Demand for our products and services may decline, making it difficult to grow assets and income;
- If the economy is unable to substantially reopen, and high levels of unemployment continue for an extended period of time, loan delinquencies, problem assets, and foreclosures may increase, resulting in increased charges and reduced income;
- Collateral for loans, especially real estate, may decline in value, which could cause loan losses to increase;
- Our allowance for loan losses may have to be increased if borrowers experience financial difficulties beyond forbearance periods, which will adversely affect our net income;
- The net worth and liquidity of loan guarantors may decline, impairing their ability to honor commitments to us;
- As the result of the decline in the Federal Reserve Board's target federal funds rate to near 0%, the yield on our assets may decline to a
 greater extent than the decline in our cost of interest-bearing liabilities, reducing our net interest margin and spread and reducing net
 income;
- A material decrease in net income or a net loss over several quarters could result in a decrease in the rate of our quarterly cash dividend;
- Our cyber security risks are increased as the result of an increase in the number of employees working remotely;
- We rely on third party vendors for certain services and the unavailability of a critical service due to the COVID-19 outbreak could have an adverse effect on us; and
- Federal Deposit Insurance Corporation premiums may increase if the agency experiences additional resolution costs.

Moreover, our future success and profitability substantially depends on the management skills of our executive officers and directors, many of whom have held officer and director positions with us for many years. The unanticipated loss or unavailability of key employees due to the outbreak could harm our ability to operate our business or execute our business strategy. We may not be successful in finding and integrating suitable successors in the event of key employee loss or unavailability.

Any one or a combination of the factors identified above could negatively impact our business, financial condition and results of operations and prospects.

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MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) of the Securities Exchange Act of 1934, as amended. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate. The Company's internal control over financial reporting is a process designed under the supervision of the Company's principal executive officer and principal financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external reporting purposes in accordance with United States generally accepted accounting principles.

Under the supervision and with the participation of management, including the Company's principal executive officer and principal financial officer, the Company conducted an evaluation of the effectiveness of its internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its evaluation under that framework, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2019. In addition, based on our assessment, management has determined that there were no material weaknesses in the Company's internal controls over financial reporting.

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

/s/ Thomas W. Schneider

Thomas W. Schneider

President and Chief Executive Officer

Oswego, New York March 23, 2020 /s/ Walter F. Rusnak

Walter F. Rusnak

Senior Vice President, Chief Financial Officer

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of Pathfinder Bancorp, Inc. Oswego, New York:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated statements of condition of Pathfinder Bancorp, Inc. and subsidiaries (the "Company") as of December 31, 2019 and 2018 and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the years in the two-year period ended December 31, 2019, and the related notes (collectively referred to as the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

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

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

We have served as the Company's auditor since 2011.

/s/ BONADIO & CO., LLP

Bonadio & Co., LLP Pittsford, New York March 23, 2020

Pathfinder Bancorp, Inc.

Consolidated Statements of Condition

(In thousands, except share and per share data)	December 31, 2019	December 31, 2018
ASSETS:		
Cash and due from banks	\$ 8,284	\$ 9,610
Interest-earning deposits (including restricted balances of \$0 and \$3,993, respectively)	11,876	16,706
Total cash and cash equivalents	20,160	26,316
Available-for-sale securities, at fair value	111,134	177,664
Held-to-maturity securities, at amortized cost (fair value of \$124,148 and \$53,769, respectively)	122,988	53,908
Marketable equity securities, at fair value	534	453
Federal Home Loan Bank stock, at cost	4,834	5,937
Loans	745,516	620,270
Loans held-for-sale (1)	35,935	_
Less: Allowance for loan losses	8,669	7,306
Loans receivable, net	772,782	612,964
Premises and equipment, net	22,699	20,623
Operating lease right-of-use assets	2,386	
Accused interest receivable	3,712	3.068
Foreclosed real estate	88	1,173
Intangible assets, net	149	165
Goodwill	4,536	4,536
Bank owned life insurance	17,403	16,941
Other assets	10,402	9,367
Total assets	\$ 1,093,807	\$ 933,115
LIABILITIES AND SHAREHOLDERS' EQUITY:		
Deposits:		
Interest-bearing	\$ 774,392	\$ 623,936
Noninterest-bearing	107,501	103,124
Total deposits	881,893	727,060
Short-term borrowings	25,138	39,000
Long-term borrowings	67,987	79,534
Subordinated loans	15,128	15,094
Accrued interest payable	396	304
Operating lease liabilities	2,650	_
Other liabilities	9,946	7,664
Total liabilities	1,003,138	868,656
Shareholders' equity:		
Preferred stock, par value \$0.01 per share; no liquidation preference; 10,000,000 and 0 shares authorized, respectively; 1,155,283 and		
0 shares issued and outstanding, respectively	12	_
Common stock, par value \$0.01; 25,000,000 authorized shares; 4,709,238 and 4,362,328 shares issued and outstanding, respectively	47	44
Additional paid in capital	49,362	29,139
Retained earnings	44,839	42,114
Accumulated other comprehensive loss	(2,971)	(6,042)
Unearned ESOP	(855)	(1,034)
Total Pathfinder Bancorp, Inc. shareholders' equity	90,434	64,221
Noncontrolling interest	235	238
Total equity	90.669	64,459
Total liabilities and shareholders' equity	\$ 1,093,807	\$ 933,115
Total naturaces and shateholders equity	ψ 1,033,007	ψ 333,113

⁽¹⁾ Based on ASC 948, Mortgage Banking, loans shall be classified as held-for-sale once a decision has been made to sell the loans and shall be transferred to the held-for-sale category at lower of cost or fair value. The loans under contract to be sold had a principal balance of \$35.8 million and net deferred fees of \$146,000 at December 31, 2019. These loans were transferred at their amortized cost of \$35.9 million as of December 31, 2019, as the fair value of these loans was greater than the amortized cost.

The accompanying notes are an integral part of the consolidated financial statements.

Pathfinder Bancorp, Inc.

Consolidated Statements of Income

	For the ve	ears ended
	December 31,	December 31,
(In thousands, except per share data)	2019	2018
Interest and dividend income:		
Loans, including fees	\$ 34,035	\$ 28,426
Debt securities:	0.000	F 1F0
Taxable	6,962	5,159
Tax-exempt	178 279	720 259
Dividends Federal funds sold and interest earning deposits	304	
5 1		246
Total interest and dividend income	41,758	34,810
Interest expense:		
Interest on deposits	10,713	6,812
Interest on short-term borrowings	377	221
Interest on long-term borrowings	1,575	1,165
Interest on subordinated loans	863	846
Total interest expense	<u>13,528</u>	9,044
Net interest income	28,230	25,766
Provision for loan losses	1,966	1,497
Net interest income after provision for loan losses	26,264	24,269
Noninterest income:	<u></u>	
Service charges on deposit accounts	1,391	1,148
Earnings and gain on bank owned life insurance	462	427
Loan servicing fees	211	170
Net gains (losses) on sales and redemptions of investment securities	329	(182)
Gains (losses) on marketable equity securities	81	(62)
Net gains on sales of loans and foreclosed real estate	64	50
Debit card interchange fees	657	576
Insurance agency revenue	844	840
Other charges, commissions & fees	878	868
Total noninterest income	4,917	3,835
Noninterest expense:		
Salaries and employee benefits	13,660	12,704
Building and occupancy	2,674	2,243
Data processing	2,339	1,924
Professional and other services	1,325	1,360
Advertising	962	920
FDIC assessments	421	492
Audits and exams	427	422
Insurance agency expense	816	875
Community service activities	620	541
Foreclosed real estate expenses	337	150
Other expenses	2,149	1,918
Total noninterest expenses	25,730	23,549
Income before income taxes	5,451	4,555
Provision for income taxes	1,165	546
Net income attributable to noncontrolling interest and Pathfinder Bancorp, Inc.	4,286	4,009
Net income (loss) attributable to noncontrolling interest	10	(22)
Net income attributable to Pathfinder Bancorp, Inc.	\$ 4,276	\$ 4,031
-		3 4,031
Convertible preferred stock dividends	208	_
Warrant dividends	23	
Undistributed earnings allocated to participating securities	467	
Net income available to common shareholders	<u>\$ 3,578</u>	\$ 4,031
Earnings per common share – basic	\$ 0.80	\$ 0.97
Earnings per common share – diluted	\$ 0.80	\$ 0.94
• •	\$ 0.24	\$ 0.24
Dividends per common share	\$ 0.24	5 0.24

Pathfinder Bancorp, Inc.

Consolidated Statements of Comprehensive Income

	Years	s ended	
	ember 31,	Dec	ember 31,
(In thousands)	 2019		2018
Net Income	\$ 4,286	\$	4,009
Other Comprehensive Income (Loss)			
Retirement Plans:			
Retirement plan net losses recognized in plan expenses	335		171
Plan gains (losses) not recognized in plan expenses	 255		(1,432)
Net unrealized gain (loss) on retirement plans	 590		(1,261)
<u>Unrealized holding gains (losses) on available-for-sale securities</u>			
Unrealized holding gains (losses) arising during the period	3,869		(1,991)
Reclassification adjustment for net (gains) losses included in net income	 (329)		182
Net unrealized gains (losses) on available-for-sale securities	 3,540		(1,809)
Accretion of net unrealized loss on securities transferred to held-to-maturity (1)	 27		175
Other comprehensive income (loss), before tax	4,157		(2,895)
Tax effect	 (1,086)		755
Other comprehensive income (loss), net of tax	 3,071		(2,140)
Comprehensive income	\$ 7,357	\$	1,869
Comprehensive income (loss), attributable to noncontrolling interest	\$ 10	\$	(22)
Comprehensive income attributable to Pathfinder Bancorp, Inc.	\$ 7,347	\$	1,891
Tax Effect Allocated to Each Component of Other Comprehensive Income (Loss)	 		
Retirement plan net losses recognized in plan expenses	\$ (88)	\$	(45)
Plan gains (losses) not recognized in plan expenses	(67)		374
Unrealized holding gains (losses) arising during the period	(1,010)		520
Reclassification adjustment for net gains (losses) included in net income	86		(48)
Accretion of net unrealized loss on securities transferred to held-to-maturity (1)	(7)		(46)
Income tax effect related to other comprehensive income (loss)	\$ (1,086)	\$	755

⁽¹⁾ The accretion of the unrealized holding losses in accumulated other comprehensive loss at the date of transfer at September 30, 2013 partially offsets the amortization of the difference between the par value and the fair value of the investment securities at the date of transfer, and is an adjustment of yield.

Pathfinder Bancorp, Inc.

Consolidated Statements of Changes in Shareholders' Equity

Years ended December 31, 2019 and December 31, 2018

					Accumulated			
			Additional		Other Com-		Non-	
	Preferred	Common	Paid in	Retained	prehensive	Unearned	controlling	
(In thousands, except share and per share data)	Stock	Stock	Capital	Earnings	Loss	ESOP	Interest	Total
Balance, January 1, 2019	\$ —	\$ 44	\$ 29,139	\$ 42,114	\$ (6,042)	\$ (1,034)	\$ 238	\$64,459
Cumulative effect of change in measurement of operating leases (2)	_	_	_	(239)	_	_	_	(239)
Net income	_	_	_	4,276	_	_	10	4,286
Other comprehensive income, net of tax	_	_	_	_	3,071	_	_	3,071
Proceeds of common stock private placement, net of expenses (1)	_	3	3,823	_	_	_		3,826
Proceeds of preferred stock private placement, net of expenses (1)	12	_	15,358	_		_	_	15,370
Effect of warrant issued from private placement (1)	_	_	373	_	_	_	_	373
ESOP shares earned (24,442 shares)	_	_	160	_	_	179	_	339
Restricted stock awards (18,709 shares)	_	_	_	_	_	_	_	_
Stock based compensation	_	_	291	_		_	_	291
Stock options exercised	_	_	218	_	_	_	_	218
Common stock dividends declared (\$0.24 per share)	_	_	_	(1,081)	_	_	_	(1,081)
Preferred stock dividends declared (\$0.18 per share)	_	_	_	(208)	_	_		(208)
Warrant dividends declared (\$0.18 per share)	_	_	_	(23)	_	_	_	(23)
Distributions from affiliates	_	_	_		_	_	(13)	(13)
Balance, December 31, 2019	\$ 12	\$ 47	\$ 49,362	\$ 44,839	\$ (2,971)	\$ (855)	\$ 235	\$90,669
Balance, January 1, 2018	<u>s</u> —	\$ 43	\$ 28,170	\$ 39,020	\$ (4,208)	\$ (1,214)	\$ 333	\$62,144
Cumulative effect of change in measurement of equity securities (3)	_	_		53	(53)	- (-,)	_	
Cumulative effect of change in investment securities transfer (4)	_	_	_	_	359	_	_	359
Net income (loss)	_	_	_	4,031	_	_	(22)	4,009
Other comprehensive loss, net of tax	_	_	_	<u></u>	(2,140)	_		(2,140)
ESOP shares earned (24,442 shares)	_	_	195	_		180	_	375
Restricted stock units (14,490 shares)	_	_	_	_	_	_		_
Stock based compensation	_	_	398	_	_	_	_	398
Stock options exercised	_	1	384	_	_	_		385
Common stock dividends declared (\$0.24 per share)	_	_	_	(1,005)	_	_		(1,005)
Cumulative effect of affiliate capital allocation	_	_	(8)	15	_	_	(7)	` <u> </u>
Distributions from affiliates	_	_		_	_	_	(66)	(66)
Balance, December 31, 2018	<u> </u>	\$ 44	\$ 29,139	\$ 42,114	\$ (6,042)	\$ (1,034)	\$ 238	\$64,459

On May 8, 2019, the Company entered into a Securities Purchase Agreement with an institutional investor, in which it sold: (i) 37,700 shares of the Company's common stock, (ii) 1,155,283 shares of a new series of preferred stock, Series B convertible perpetual preferred stock; and (iii) a warrant to purchase 125,000 shares of common stock in a private placement transaction. The Company also entered into Subscription Agreements with certain directors and executive officers of the Company as well as other accredited investors. Pursuant to the Subscription Agreements, the investors purchased an aggregate of 269,277 shares of common stock.
Cumulative effect of the adoption of ASU 2016-02, Leases (Topic 842), based on the difference in the right-of-use asset and lease liability as of January 1, 2019.
Cumulative effect of unrealized gain on marketable equity securities based on the adoption of ASU 2016-01 – Financial Instruments – Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Liabilities. (1)

Cumulative effect of unrealized gains on the transfer of 52 investment securities from held-to-maturity classification to available-for-sale classification based on the adoption of ASU 2017-12: Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities. (4)

Pathfinder Bancorp, Inc.

Consolidated Statements of Cash Flows

(Incompany) (2019) (2019) OPERATIOR ACTIVITIES 3 4,276 \$ 4,321 Adjustments to reconcile ent income to net cash flows from operating activities: ————————————————————————————————————		For the year Decemb	
Net income attributable to Pathfinder Bancorp, Inc. \$ 4,936 \$ 4,031 Adjustments to reconcile net income to net cash flows from operating activities: Type is a second of the path of the			
Adjustments to reconcile net income to net cash flows from operating activities 1,966 1,397 Deferred income (benefit) tax (15) 33 Amortization of operating leases 25 — Proceeds from sales of loans 1,492 216 Originations of loans held-for-sale (1,47) (212) Real estate acquired through foreclosure (31) (47) Loans (33) (33) (33) Available-for-sale investment securities (73) 111 Premises and equipment — (8) Perpectation (15) 1,180 Amortization of mortgage servicing rights (3) 1 Amortization of deferred floan costs (27) 321 Amortization of deferred loan costs (27) 321 Amortization of deferred loan costs (3) 4 Amortization of deferred loan costs (462) (427) Earnings and gain on bank owned life insurance (3) 4 Real change in accrued interest receivable (40) 427 Net amortization of permisman add discounts on inve			
Provision for loan losses 1,966 1,497 Deferred income (benefit) tax (16) 343 Amortization of operating lesses 25 — Proceeds from sales of loans (1,492) 216 Originations of loans held-for-sale (1,474) 2126 Realized (gains) losses on sales, redemptions and calls of: 33 (3 Real estate acquired through foreclosure (33) (3) Loans (33) (3) (3) Available-for-sale investment securities (75) 171 Held-to-maturity investment securities (75) 171 Held-to-maturity investment securities (8) — Marketable equity securities (8) — Premises and equipment — (8) Marketable equity securities (8) 1.520 1,180 Amortization of ortegage servicing rights (3) 12 2 Amortization of offeered financing from subordinated debt 34 35 2 2 2 1,66 Anortization of intangible assets 16 17	17	\$ 4,276	\$ 4,031
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INVESTING ACTIVITIES Purchase of investment securities available-for-sale (75,551) (55,291) Purchase of investment securities held-to-maturity (88,892) (28,452) Purchase of Federal Home Loan Bank stock (10,201) (8,679) Proceeds from redemption of Federal Home Loan Bank stock 11,304 6,597 Proceeds from maturities and principal reductions of investment securities available-for-sale 42,433 44,577 Proceeds from sales, redemptions and calls of: 34,631 44,631 44,631 Proceeds from sales, redemptions and calls of: 34,631 44,631 44,631 44,631 Available-for-sale investment securities 635 953 46,631 46,631 46,631 46,631 46,631 46,631 46,631 46,631 46,631 47,644 47,664 47,44 47,664 47,44 47,664 47,44 47,664 47,64 47,664 47,664 47,664 47,664 47,664 47,664 47,664 47,664 47,664 47,664 47,664 47,664 47,664 47,664 47,664 47,664	Net change in other assets and liabilities	237	262
Purchase of investment securities available-for-sale (75,551) (55,291) Purchase of investment securities held-to-maturity (88,892) (28,452) Purchase of Federal Home Loan Bank stock (10,201) (8,679) Proceeds from redemption of Federal Home Loan Bank stock 11,304 6,597 Proceeds from maturities and principal reductions of investment securities available-for-sale 42,433 44,577 Proceeds from sales, redemptions and calls of: 39,101 5,842 Proceeds from sales, redemptions and calls of: 34,631 34,631 Held-to-maturity investment securities 635 953 Real estate acquired through foreclosure 1,664 744 Premise and equipment — (5,000) Proceeds from bank owned life insurance — (5,000) Proceeds from bank owned life insurance — 228 Net change in loans (162,060) (42,497) Purchase of premises and equipment 5,692)	Net cash flows from operating activities	8,120	8,982
Purchase of investment securities held-to-maturity (88,892) (28,452) Purchase of Federal Home Loan Bank stock (10,201) (8,679) Proceeds from redemption of Federal Home Loan Bank stock 11,304 6,597 Proceeds from maturities and principal reductions of investment securities available-for-sale 42,433 44,577 Proceeds from maturities and principal reductions of investment securities held-to-maturity 19,101 5,842 Proceeds from sales, redemptions and calls of:	INVESTING ACTIVITIES		
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Proceeds from redemption of Federal Home Loan Bank stock11,3046,597Proceeds from maturities and principal reductions of investment securities available-for-sale42,43344,577Proceeds from maturities and principal reductions of investment securities held-to-maturity19,1015,842Proceeds from sales, redemptions and calls of:102,35234,631Available-for-sale investment securities635953Real estate acquired through foreclosure1,664744Premise and equipment—14Purchase of bank owned life insurance—(5,000)Proceeds from bank owned life insurance—228Net change in loans(162,060)(42,497)Purchase of premises and equipment(3,596)(5,692)	Purchase of investment securities held-to-maturity	(88,892)	(28,452)
Proceeds from maturities and principal reductions of investment securities available-for-sale42,43344,577Proceeds from maturities and principal reductions of investment securities held-to-maturity19,1015,842Proceeds from sales, redemptions and calls of:Available-for-sale investment securities102,35234,631Held-to-maturity investment securities635953Real estate acquired through foreclosure1,664744Premise and equipment—14Purchase of bank owned life insurance—(5,000)Proceeds from bank owned life insurance—228Net change in loans(162,060)(42,497)Purchase of premises and equipment(3,596)(5,692)	Purchase of Federal Home Loan Bank stock	(10,201)	(8,679)
Proceeds from maturities and principal reductions of investment securities held-to-maturity19,1015,842Proceeds from sales, redemptions and calls of: Available-for-sale investment securities102,35234,631Held-to-maturity investment securities635953Real estate acquired through foreclosure1,664744Premise and equipment—14Purchase of bank owned life insurance—(5,000)Proceeds from bank owned life insurance—228Net change in loans(162,060)(42,497)Purchase of premises and equipment(3,596)(5,692)	Proceeds from redemption of Federal Home Loan Bank stock	11,304	6,597
Proceeds from sales, redemptions and calls of: 34,631 Available-for-sale investment securities 635 953 Held-to-maturity investment securities 635 953 Real estate acquired through foreclosure 1,664 744 Premise and equipment — 14 Purchase of bank owned life insurance — (5,000) Proceeds from bank owned life insurance — 228 Net change in loans (162,060) (42,497) Purchase of premises and equipment (3,596) (5,692)	Proceeds from maturities and principal reductions of investment securities available-for-sale	42,433	44,577
Available-for-sale investment securities 102,352 34,631 Held-to-maturity investment securities 635 953 Real estate acquired through foreclosure 1,664 744 Premise and equipment — 14 Purchase of bank owned life insurance — (5,000) Proceeds from bank owned life insurance — 228 Net change in loans (162,060) (42,497) Purchase of premises and equipment (3,596) (5,692)	Proceeds from maturities and principal reductions of investment securities held-to-maturity	19,101	5,842
Held-to-maturity investment securities 635 953 Real estate acquired through foreclosure 1,664 744 Premise and equipment — 14 Purchase of bank owned life insurance — (5,000) Proceeds from bank owned life insurance — 228 Net change in loans (162,060) (42,497) Purchase of premises and equipment (3,596) (5,692)	Proceeds from sales, redemptions and calls of:		
Real estate acquired through foreclosure 1,664 744 Premise and equipment — 14 Purchase of bank owned life insurance — (5,000) Proceeds from bank owned life insurance — 228 Net change in loans (162,060) (42,497) Purchase of premises and equipment (3,596) (5,692)	Available-for-sale investment securities	102,352	34,631
Premise and equipment — 14 Purchase of bank owned life insurance — (5,000) Proceeds from bank owned life insurance — 228 Net change in loans (162,060) (42,497) Purchase of premises and equipment (3,596) (5,692)	Held-to-maturity investment securities	635	953
Purchase of bank owned life insurance — (5,000) Proceeds from bank owned life insurance — 228 Net change in loans (162,060) (42,497) Purchase of premises and equipment (3,596) (5,692)	Real estate acquired through foreclosure	1,664	744
Proceeds from bank owned life insurance — 228 Net change in loans (162,060) (42,497) Purchase of premises and equipment (3,596) (5,692)	Premise and equipment	_	14
Net change in loans (162,060) (42,497) Purchase of premises and equipment (3,596) (5,692)			(5,000)
Purchase of premises and equipment (3,596) (5,692)	Proceeds from bank owned life insurance	-	228
	Net change in loans	(162,060)	(42,497)
Net cash flows from investing activities (162,811) (52,025)	Purchase of premises and equipment	(3,596)	(5,692)
	Net cash flows from investing activities	(162,811)	(52,025)

	For the yea Decemb	
(In thousands)	2019	2018
FINANCING ACTIVITIES		
Net change in demand deposits, NOW accounts, savings accounts, money management deposit accounts, MMDA		
accounts and escrow deposits	10,021	(43,969)
Net change in time deposits	49,708	65,525
Net change in brokered deposits	95,104	(18,099)
Net change in short-term borrowings	(13,862)	8,400
Payments on long-term borrowings	(31,227)	(2,000)
Proceeds from long-term borrowings	19,680	38,246
Proceeds from exercise of stock options	218	385
Cash dividends paid to common shareholders	(1,091)	(1,025)
Cash dividends paid to preferred shareholders	(139)	_
Cash dividends paid on warrants	(15)	_
Net proceeds from common stock private placement	4,199	
Net proceeds from preferred stock private placement	15,370	—
Proceeds from finance lease transaction	572	
Change in noncontrolling interest, net	(3)	(95)
Net cash flows from financing activities	148,535	47,368
Change in cash and cash equivalents	(6,156)	4,325
Cash and cash equivalents at beginning of period	26,316	21,991
Cash and cash equivalents at end of period	\$ 20,160	\$ 26,316
CASH PAID DURING THE PERIOD FOR:		
Interest	\$ 13,436	\$ 8,925
Income taxes	750	662
NON-CASH INVESTING ACTIVITY		
Real estate acquired in exchange for loans	548	1,420
RESTRICTED CASH		
Federal Reserve Bank Reserve Requirements included in interest earning deposits	_	3,993

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations

The accompanying consolidated financial statements include the accounts of Pathfinder Bancorp, Inc. (the "Company") and its wholly owned subsidiary, Pathfinder Bank (the "Bank"). The Company is a Maryland corporation headquartered in Oswego, New York. On October 16, 2014, the Company completed its conversion from the mutual holding company structure and the related public offering and is now a stock holding company that is fully owned by the public. As a result of the conversion, the mutual holding company and former mid-tier holding company were merged into Pathfinder Bancorp, Inc. The primary business of the Company is its investment in Pathfinder Bank (the "Bank") which is 100% owned by the Company. The Bank has two wholly owned operating subsidiaries, Pathfinder Risk Management Company, Inc. ("PRMC") and Whispering Oaks Development Corp. All significant inter-company accounts and activity have been eliminated in consolidation. Although the Company owns, through its subsidiary PRMC, 51% of the membership interest in FitzGibbons Agency, LLC ("FitzGibbons"), the Company is required to consolidate 100% of FitzGibbons within the consolidated financial statements. The 49% of which the Company does not own is accounted for separately as noncontrolling interests within the consolidated financial statements. The Company received \$24.9 million in net proceeds from the sale of approximately 2.6 million non-amortizing Subordinated Loan and subsequently used those proceeds in February 2016 to substantially fund the full retirement of \$13.0 million in SBLF Preferred stock. The Company received \$19.6 million in net proceeds from the sale of 37,700 shares of common stock and 1,155,283 shares of preferred stock as a result of the Private Placement in May 2019.

The Company has seven branch offices located in Oswego County, three branch offices in Onondaga County and one limited purpose office in Oneida County. The Company is primarily engaged in the business of attracting deposits from the general public in the Company's market area, and investing such deposits, together with other sources of funds, in loans secured by commercial real estate, business assets, one-to-four family residential real estate and investment securities.

Use of Estimates in the Preparation of Consolidated Financial Statements

The preparation of consolidated financial statements in accordance with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Management has identified the allowance for loan losses, deferred income taxes, pension obligations, the annual evaluation of the Company's goodwill for possible impairment and the evaluation of investment securities for other than temporary impairment and the estimation of fair values for accounting and disclosure purposes to be the accounting areas that require the most subjective and complex judgments, and as such, could be the most subject to revision as new information becomes available.

The Company is subject to the regulations of various governmental agencies. The Company also undergoes periodic examinations by the regulatory agencies which may subject it to further changes with respect to asset valuations, amounts of required loss allowances, and operating restrictions resulting from the regulators' judgments based on information available to them at the time of their examinations.

Significant Group Concentrations of Credit Risk

Most of the Company's activities are with customers located primarily in Oswego and Onondaga counties of New York State. A large portion of the Company's portfolio is centered in residential and commercial real

estate. The Company closely monitors real estate collateral values and requires additional reviews of commercial real estate appraisals by a qualified third party for commercial real estate loans in excess of \$400,000. All residential loan appraisals are reviewed by an individual or third party who is independent of the loan origination or approval process and was not involved in the approval of appraisers or selection of the appraiser for the transaction, and has no direct or indirect interest, financial or otherwise in the property or the transaction. Note 4 discusses the types of securities that the Company invests in. Note 5 discusses the types of lending that the Company engages in. The Company does not have any significant concentrations to any one industry or customer.

Advertising

The Company generally follows the policy of charging the costs of advertising to expense as incurred. Expenditures for new marketing and advertising material designs and/or media content, related to specifically-identifiable marketing campaigns are capitalized and expensed over the estimated life of the campaign. Such periods of time are generally 12-24 months in duration and do not exceed 36 months.

Noncontrolling Interest

Noncontrolling interest represents the portion of ownership and profit or loss that is attributable to the minority owners of FitzGibbons.

Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, amounts due from banks and interest-bearing deposits (with original maturity of three months or less).

Investment Securities

The Company classifies investment securities as either available-for-sale or held-to-maturity. The Company does not hold any securities considered to be trading. Available-for-sale securities are reported at fair value, with net unrealized gains and losses reflected as a separate component of shareholders' equity, net of the applicable income tax effect. Held-to-maturity securities are those that the Company has the ability and intent to hold until maturity and are reported at amortized cost.

Gains or losses on investment security transactions are based on the amortized cost of the specific securities sold. Premiums and discounts on securities are amortized and accreted into income using the interest method over the period to maturity.

The Company records its investment in marketable equity securities ("MES") at fair value. Changes in the fair value of MES are recorded as additions to, or subtractions from, net income in the period that the change occurs. These changes in fair value are separately disclosed as gains (losses) on equity securities on the Consolidated Statements of Income.

Note 4 to the consolidated financial statements includes additional information about the Company's accounting policies with respect to the impairment of investment securities.

Federal Home Loan Bank Stock

Federal law requires a member institution of the Federal Home Loan Bank ("FHLB") system to hold stock of its district FHLB according to a predetermined formula. The stock is carried at cost.

Transfers of Financial Assets

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

Loans

The Company grants mortgage, commercial, municipal, and consumer loans to customers. Loans that management has the intent and ability to hold for the foreseeable future or until maturity or pay-off are stated at their outstanding unpaid principal balances, less the allowance for loan losses plus net deferred loan origination costs. The ability of the Company's debtors to honor their contracts is dependent upon the real estate and general economic conditions in the market area. Interest income is generally recognized when income is earned using the interest method. Nonrefundable loan fees received and related direct origination costs incurred are deferred and amortized over the life of the loan using the interest method, resulting in a constant effective yield over the loan term. Deferred fees are recognized into income and deferred costs are charged to income immediately upon prepayment of the related loan.

The loans receivable portfolio is segmented into residential mortgage, commercial and consumer loans. The residential mortgage segment consists of one-to-four family first-lien residential mortgages and construction loans. Commercial loans consist of the following classes: real estate, lines of credit, other commercial and industrial, and tax-exempt loans. Consumer loans include both home equity lines of credit and loans with junior liens and other consumer loans.

Allowance for Loan Losses

The allowance for loan losses represents management's estimate of losses inherent in the loan portfolio as of the date of the statement of condition and it is recorded as a reduction of loans. The allowance is increased by the provision for loan losses, and decreased by charge-offs, net of recoveries. Loans deemed to be uncollectible are charged against the allowance for loan losses, and subsequent recoveries, if any, are credited to the allowance. All, or part, of the principal balance of loans receivable are charged off to the allowance as soon as it is determined that the repayment of all, or part, of the principal balance is highly unlikely. Non-residential consumer loans are generally charged off no later than 120 days past due on a contractual basis, unless productive collection efforts are providing results. Consumer loans may be charged off earlier in the event of bankruptcy, or if there is an amount that is deemed uncollectible. No portion of the allowance for loan losses is restricted to any individual loan product and the entire allowance is available to absorb any and all loan losses.

The allowance for loan losses is maintained at a level considered adequate to provide for losses that can be reasonably anticipated. Management performs a quarterly evaluation of the adequacy of the allowance. The allowance is based on three major components which are; specific components for larger loans, recent historical losses and several qualitative factors applied to a general pool of loans, and an unallocated component.

The first component is the specific component that relates to loans that are classified as impaired. For these loans, an allowance is established when the discounted cash flows or collateral value of the impaired loan is lower than the carrying value of that loan.

The second or general component covers pools of loans, by loan class, not considered impaired, smaller balance homogeneous loans, such as residential real estate, home equity and other consumer loans. These pools of loans are evaluated for loss exposure first based on historical loss rates for each of these categories of loans. The ratio

of net charge-offs to loans outstanding within each product class, over the most recent eight quarters, lagged by one quarter, is used to generate the historical loss rates. In addition, qualitative factors are added to the historical loss rates in arriving at the total allowance for loan loss need for this general pool of loans. The qualitative factors include changes in national and local economic trends, the rate of growth in the portfolio, trends of delinquencies and nonaccrual balances, changes in loan policy, and changes in lending management experience and related staffing. Each factor is assigned a value to reflect improving, stable or declining conditions based on management's best judgment using relevant information available at the time of the evaluation. These qualitative factors, applied to each product class, make the evaluation inherently subjective, as it requires material estimates that may be susceptible to significant revision as more information becomes available. Adjustments to the factors are supported through documentation of changes in conditions in a narrative accompanying the allowance for loan loss analysis and calculation.

The third or unallocated component is maintained to cover uncertainties that could affect management's estimate of probable losses. The unallocated component of the allowance reflects the margin of imprecision inherent in the underlying assumptions used in the methodologies for estimating specific and general losses in the portfolio and generally comprises less than 10% of the total allowance for loan loss.

A loan is considered impaired when, based on current information and events, it is probable that the Company will be unable to collect the scheduled payments of principal or interest when due according to the contractual terms of the loan agreement. Factors considered by management in determining impairment include payment status, collateral value and the probability of collecting scheduled principal and interest payments when due. Loans that experience insignificant payment delays and payment shortfalls generally are not classified as impaired. Management determines the significance of payment delays and shortfalls on a case-by case basis, taking into consideration all of the circumstances surrounding the loan and the borrower, including the length and reason for the delay, the borrower's prior payment record and the amount of shortfall in relation to what is owed. Impairment is measured by either the present value of the expected future cash flows discounted at the loan's effective interest rate or the fair value of the underlying collateral, if the loan is collateral dependent. The majority of the Company's loans utilize the fair value of the underlying collateral.

An allowance for loan loss is established for an impaired loan if its carrying value exceeds its estimated fair value. The estimated fair values of substantially all of the Company's impaired loans are measured based on the estimated fair value of the loan's collateral. For loans secured by real estate, estimated fair values are determined primarily through third-party appraisals, less costs to sell. Appraised values are discounted to arrive at the estimated selling price of the collateral, which is considered to be the estimated fair value. The discounts also include estimated costs to sell the property.

For commercial and industrial loans secured by non-real estate collateral, such as accounts receivable, inventory and equipment, estimated fair values are determined based on the borrower's financial statements, inventory reports, accounts receivable agings or equipment appraisals or invoices. Indications of value from these sources are generally discounted based on the age of the financial information or the quality of the assets.

Large groups of homogeneous loans are collectively evaluated for impairment. Accordingly, the Company does not separately identify individual residential mortgage loans less than \$300,000, home equity and other consumer loans for impairment disclosures, unless such loans are related to borrowers with impaired commercial loans or they are subject to a troubled debt restructuring agreement. Loans that are related to borrowers with impaired commercial loans or are subject to a troubled debt restructuring agreement are evaluated individually for impairment.

Commercial loans whose terms are modified are classified as troubled debt restructurings if the Company grants such borrowers concessions and it is deemed that those borrowers are experiencing financial difficulty. Concessions granted under a troubled debt restructuring generally include but are not limited to a temporary reduction in the interest rate or an extension of a loan's stated maturity date. Commercial loans classified as troubled debt restructurings are designated as impaired and evaluated individually as discussed above.

The allowance calculation methodology includes further segregation of loan classes into risk rating categories. The borrower's overall financial condition, repayment sources, guarantors and value of the collateral, if appropriate, are evaluated not less than annually for commercial loans or when credit deficiencies arise on all loans. Credit quality risk ratings include regulatory classifications of special mention, substandard, doubtful and loss. See Note 5 for a description of these regulatory classifications.

In addition, Federal and State regulatory agencies, as an integral part of their examination process, periodically review the Company's allowance for loan losses and may require the Company to recognize additions to the allowance based on their judgments about information available to them at the time of their examination, which may not be currently available to management. Based on management's comprehensive analysis of the loan portfolio, management believes the current level of the allowance for loan losses is adequate.

Income Recognition on Impaired and Nonaccrual Loans

For all classes of loans receivable, the accrual of interest is discontinued when the contractual payment of principal or interest has become 90 days past due or management has serious doubts about further collectability of principal or interest, even though the loan may be currently performing. A loan may remain on accrual status if it is either well secured or guaranteed and in the process of collection. When a loan is placed on nonaccrual status, unpaid interest is reversed and charged to interest income. Interest received on nonaccrual loans, including impaired loans, generally is either applied against principal or reported as interest income, according to management's judgment as to the collectability of principal. Generally, loans are restored to accrual status when the obligation is brought current, has performed in accordance with the contractual terms for a reasonable period of time, generally six months, and the ultimate collectability of the total contractual principal and interest is no longer in doubt. Nonaccrual troubled debt restructurings are restored to accrual status if principal and interest payments, under the modified terms, are current for six consecutive months after modification.

For nonaccrual loans, when future collectability of the recorded loan balance is expected, interest income may be recognized on a cash basis. In the case where a nonaccrual loan had been partially charged off, recognition of interest on a cash basis is limited to that which would have been recognized on the recorded loan balance at the contractual interest rate. Cash interest receipts in excess of that amount are recorded as recoveries to the allowance for loan losses until prior charge-offs have been fully recovered.

Off-Balance Sheet Credit Related Financial Instruments

In the ordinary course of business, the Company has entered into commitments to extend credit, including commitments under standby letters of credit. Such financial instruments are recorded when they are funded.

Premises and Equipment

Premises and equipment are stated at cost, less accumulated depreciation. Depreciation is computed on a straight-line basis over the estimated useful lives of the related assets, ranging up to 40 years for premises and 10 years for equipment. Maintenance and repairs are charged to operating expenses as incurred. The asset cost and accumulated depreciation are removed from the accounts for assets sold or retired and any resulting gain or loss is included in the determination of income.

Foreclosed Real Estate

Physical possession of residential real estate property collateralizing a residential mortgage loan occurs when legal title is obtained upon completion of foreclosure or when the borrower conveys all interest in the property to satisfy the loan through completion of a deed-in-lieu of foreclosure or through a similar legal agreement. Properties acquired through foreclosure, or by deed-in-lieu of foreclosure, are recorded at their fair value less estimated costs to sell. Fair value is typically determined based on evaluations by third parties. Costs incurred in

connection with preparing the foreclosed real estate for disposition are capitalized to the extent that they enhance the overall fair value of the property. Any write-downs on the asset's fair value less costs to sell at the date of acquisition are charged to the allowance for loan losses. Subsequent write downs and expenses of foreclosed real estate are included as a valuation allowance and recorded in noninterest expense.

Goodwill and Intangible Assets

Goodwill represents the excess cost of an acquisition over the fair value of the net assets acquired. Goodwill is not amortized, but is evaluated annually for impairment. Intangible assets, such as customer lists, are amortized over their useful lives, generally 15 years.

Mortgage Servicing Rights

Originated mortgage servicing rights are recorded at their fair value at the time of transfer of the related loans and are amortized in proportion to, and over the period of, estimated net servicing income or loss. The carrying value of the originated mortgage servicing rights is periodically evaluated for impairment or between annual evaluations under certain circumstances.

Stock-Based Compensation

Compensation costs related to share-based payment transactions are recognized based on the grant-date fair value of the stock-based compensation issued. Compensation costs are recognized over the period that an employee provides service in exchange for the award. Compensation costs related to the Employee Stock Ownership Plan are dependent upon the average stock price and the shares committed to be released to plan participants through the period in which income is reported.

Retirement Benefits

The Company has a non-contributory defined benefit pension plan that covered substantially all employees. On May 14, 2012, the Company informed its employees of its decision to freeze participation and benefit accruals under the plan, primarily to reduce some of the volatility in earnings that can accompany the maintenance of a defined benefit plan. The plan was frozen on June 30, 2012. Compensation earned by employees up to June 30, 2012 is used for purposes of calculating benefits under the plan but there will be no future benefit accruals after this date. Participants as of June 30, 2012 will continue to earn vesting credit with respect to their frozen accrued benefits as they continue to work. Pension expense under these plans is charged to current operations and consists of several components of net pension cost based on various actuarial assumptions regarding future experience under the plans.

Gains and losses, prior service costs and credits, and any remaining transition amounts that have not yet been recognized through net periodic benefit cost are recognized in accumulated other comprehensive loss, net of tax effects, until they are amortized as a component of net periodic cost. Plan assets and obligations are measured as of the Company's statement of condition date.

The Company has unfunded deferred compensation and supplemental executive retirement plans for selected current and former employees and officers that provide benefits that cannot be paid from a qualified retirement plan due to Internal Revenue Code restrictions. These plans are nonqualified under the Internal Revenue Code, and assets used to fund benefit payments are not segregated from other assets of the Company, therefore, in general, a participant's or beneficiary's claim to benefits under these plans is as a general creditor.

The Bank sponsors an Employee Stock Ownership Plan ("ESOP") covering substantially all full time employees. The cost of shares issued to the ESOP but not committed to be released to the participants is presented in the consolidated statement of condition as a reduction of shareholders' equity. ESOP shares are released to the

participants on an annual basis in accordance with a predetermined schedule. The Company records ESOP compensation expense based on the shares committed to be released and allocated to the participant's accounts multiplied by the average share price of the Company's stock over the period. Dividends related to unallocated shares are recorded as compensation expense.

Derivative Financial Instruments

Derivatives are recorded on the statement of condition as assets and liabilities measured at their fair value. The accounting for changes in the fair value of a derivative depends on whether it has been designated and qualifies as part of a hedging relationship. The specific accounting treatment for increases and decreases in the value of derivatives depends upon the use of the specific derivatives. There are two primary types of interest rate derivatives that may be employed by the Company:

- Fair Value Hedge As a result of interest rate fluctuations, fixed-rate assets and liabilities will appreciate or depreciate in fair value. When effectively hedged, this appreciation or depreciation will generally be offset by fluctuations in the fair value of derivative instruments that are linked to the hedged assets and liabilities. This strategy is referred to as a fair value hedge. For a fair value hedge, changes in the fair value of the derivative instrument and changes in the fair value of the hedged asset or liability are recognized currently in earnings.
- Cash Flow Hedge Cash flows related to floating rate assets and liabilities will fluctuate with changes in the underlying rate index. When effectively hedged, the increases or decreases in cash flows related to the floating-rate asset or liability will generally be offset by changes in cash flows of the derivative instruments designated as a hedge. This strategy is referred to as a cash flow hedge. For a cash flow hedge, changes in the fair value of the derivative instrument, to the extent that it is effective, are recorded in other comprehensive income and subsequently reclassified to earnings as the hedged transaction impacts net income. Any ineffective portion of a cash flow hedge is recognized currently in earnings.

Income Taxes

Provisions for income taxes are based on taxes currently payable or refundable and deferred income taxes on temporary differences between the tax basis of assets and liabilities and their reported amounts in the consolidated financial statements. Deferred tax assets and liabilities are reported in the consolidated financial statements at currently enacted income tax rates applicable to the period in which the deferred tax assets and liabilities are expected to be realized or settled.

Earnings Per Share

Basic net income per share was calculated using the two-class method by dividing net income (less any dividends on participating securities) by the weighted average number of shares of common stock and participating securities outstanding for the period. Diluted earnings per share may include the additional effect of other securities, if dilutive, in which case the dilutive effect of such securities is calculated by applying either the two-class method or the Treasury Stock method to the assumed exercise or vesting of potentially dilutive common shares. The method yielding the more dilutive result is ultimately reported for the applicable period. Potentially dilutive common stock equivalents primarily consist of employee stock options and restricted stock units. Unallocated common shares held by the ESOP are not included in the weighted average number of common shares outstanding for purposes of calculating earnings per common share until they are committed to be released to plan participants. Note 3 provides more information related to earnings per share.

Segment Reporting

The Company has evaluated the activities relating to its strategic business units. The controlling interest in the FitzGibbons Agency is dissimilar in nature and management when compared to the Company's other strategic

business units which are judged to be similar in nature and management. The Company has determined that the FitzGibbons Agency is below the reporting threshold in size in accordance with Accounting Standards Codification 280. Accordingly, the Company has determined it has no reportable segments.

Comprehensive Income (Loss)

Accounting principles generally require that recognized revenue, expenses, gains and losses be included in net income. Although certain changes in assets and liabilities are reported as a separate component of the equity section of the statement of condition, such items, along with net income, are components of comprehensive income.

Accumulated other comprehensive loss represents the sum of these items, with the exception of net income, as of the balance sheet date and is represented in the table below.

As of Dec	ember 31,
2019	2018
\$(3,677)	\$(4,266)
960	1,114
(2,717)	(3,152)
(293)	(3,833)
77	1,001
(216)	(2,832)
(54)	(82)
16	24
(38)	(58)
\$(2,971)	\$(6,042)
	2019 \$(3,677) 960 (2,717) (293) 77 (216) (54) 16 (38)

Reclassifications

Certain amounts in the 2018 consolidated financial statements have been reclassified to conform to the current year presentation. These reclassifications had no effect on net income as previously reported.

NOTE 2: NEW ACCOUNTING PRONOUNCEMENTS

The Financial Accounting Standards Board ("FASB") and, to a lesser extent, other authoritative rulemaking bodies promulgate GAAP to regulate the standards of accounting in the United States. From time to time, the FASB issues new GAAP standards, known as Accounting Standards Updates ("ASUs") some of which, upon adoption, may have the potential to change the way in which the Company recognizes or reports within its consolidated financial statements. The following presentation provides a description of standards that were adopted in 2019 and standards not yet adopted as of December 31, 2019, but could have an impact on the Company's consolidated financial statements upon adoption.

Standards Adopted in 2019

Standard: Leases (ASU 2016-02: Leases [Topic 842])

Description: The new guidance requires lessees to record a right-of-use asset and a lease liability for all leases with a term greater than 12 months. While the guidance requires all leases to be recognized in the balance sheet,

there continues to be a differentiation between finance leases and operating leases for purposes of income statement recognition and cash flow statement presentation. For finance leases, interest on the lease liability and amortization of the right-of-use asset will be recognized separately in the statement of income. Repayments of principal on those lease liabilities will be classified within financing activities and payments of interest on the lease liability will be classified within operating activities in the statement of cash flows. For operating leases, a single lease cost is recognized in the statement of income and allocated over the lease term, generally on a straight-line basis. All cash payments are presented within operating activities in the statement of cash flows. The accounting applied by lessors is largely unchanged from existing GAAP, however, the guidance eliminates the accounting model for leveraged leases for leases that commence after the effective date of the guidance.

Required Date of Implementation: January 1, 2019

Effect on Consolidated Financial Statements: The Company occupies certain banking offices and uses certain equipment under noncancelable operating lease agreements which were not reflected in its consolidated balance sheet at December 31, 2018. Upon adoption of this ASU on January 1, 2019, the Company recorded an asset of \$2.5 million and a corresponding liability of \$2.7 million, as a result of recognizing right-of-use assets and lease liabilities on its consolidated statement of financial condition. The Company elected to adopt the transition relief under Topic 842, Leases, using the modified retrospective transition method recognizing a cumulative effect adjustment to the opening balance of retained earnings of \$239,000. The periods presented prior to January 1, 2019 continue to be in accordance with ASC 840. Under the new lease standard, disclosures are required to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. The Company uses its incremental borrowing rate based on the information available in determining the present value of lease payments. We elected all applicable practical expedients and implemented internal controls and key system functionality to enable the preparation of financial information on adoption.

The Company owns certain properties that it leases to unaffiliated third parties at market rates. Lease rental income was \$34,000 and \$30,000 for the twelve months ended March 31, 2019 and 2018, respectively. All lease agreements are accounted for as operating leases. The Company has no unamortized initial direct costs related to the establishment of these lease agreements at January 1, 2019.

Standard: Premium Amortization on Purchased Callable Debt Securities (*ASU 2017-08: Receivables – Nonrefundable Fees and Other Costs [Subtopic 310-20]: Premium Amortization on Purchased Callable Debt Securities*)

Description: The amended guidance requires the premium on callable debt securities to be amortized to the earliest call date. The amendments do not require an accounting change for securities held at a discount; the discount continues to be amortized to maturity.

Required Date of Implementation: January 1, 2019

Effect on Consolidated Financial Statements: The Company has consistently employed accounting methodologies with respect to securities with purchased premiums that are consistent with the guidance provided in this Update. Accordingly, the adoption of this guidance had no material impact on the Company's consolidated financial statements.

Standard: Improvements to Nonemployee Share-Based Payment Accounting (ASU 2018-07: Compensation – Stock Compensation [Topic 718])

Description: Consistent with the accounting requirement for employee share-based payment awards, under the new guidance, nonemployee share-based payment awards within the scope of Topic 718 are measured on the

grant date at the grant-date fair value of the equity instruments that an entity is obligated to issue when the good has been delivered or the service has been rendered and any other conditions necessary to earn the right to benefit from the instruments have been satisfied. The amendments in this ASU affect all entities that enter into share-based payment transactions for acquiring goods and services from nonemployees.

Required Date of Implementation: January 1, 2019

Effect on Consolidated Financial Statements: The amendments should be applied using a prospective transition method. The Company is not currently party to any nonemployee share-based payment awards whereby the participant is obligated to any specific performance requirement other than to remain in the service of the Company through a specified vesting date, or schedule of vesting dates. Accordingly, the adoption of this ASU had no material impact on the Company's consolidated financial statements.

Standards Not Yet Adopted as of December 31, 2019

Standard: Measurement of Credit Losses on Financial Instruments (ASU 2016-13: Financial Instruments—Credit Losses [Topic 326]: Measurement of Credit Losses on Financial Instruments)

Description: The amended guidance replaces the current incurred loss model for determining the allowance for credit losses. The guidance requires financial assets measured at amortized cost to be presented at the net amount expected to be collected. The allowance for credit losses will represent a valuation account that is deducted from the amortized cost basis of the financial assets to present their net carrying value at the amount expected to be collected. The income statement will reflect the measurement of credit losses for newly recognized financial assets as well as expected increases or decreases of expected credit losses that have taken place during the period. When determining the allowance, expected credit losses over the contractual term of the financial asset(s) (taking into account prepayments) will be estimated considering relevant information about past events, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. The amended guidance also requires recording an allowance for credit losses for purchased financial assets with a more-than-insignificant amount of credit deterioration since origination. The initial allowance for these assets will be added to the purchase price at acquisition rather than being reported as an expense. Subsequent changes in the allowance will be recorded through the income statement as an expense adjustment. In addition, the amended guidance requires credit losses relating to available-for-sale debt securities to be recorded through an allowance for credit losses. The calculation of credit losses for available-for-sale securities will be similar to how it is determined under existing guidance.

Required Date of Implementation: January 1, 2023 (early adoption permitted as of January 1, 2019).

Effect on Consolidated Financial Statements: The Company is assessing the new guidance to determine what modifications to existing credit estimation processes may be required. The new guidance is complex and management is still evaluating the preliminary output from models that have been developed during this evaluative phase. In addition, future levels of allowances will also reflect new requirements to include estimated credit losses on investment securities classified as held-to-maturity, if any. The Company has formed an Implementation Committee, whose membership includes representatives of senior management, to develop plans that will encompass: (1) internal methodology changes (2) data collection and management activities, (3) internal communication requirements, and (4) estimation of the projected impact of this guidance. It has been generally assumed that the conversion from the incurred loss model, required under current GAAP, to the CECL methodology will, more likely than not, result in increases to the allowances for credit losses at many financial institutions. However, the amount of any change in the allowance for credit losses resulting from the new guidance will ultimately be impacted by the provisions of this guidance as well as by the loan and debt security portfolios composition and asset quality at the adoption date, and economic conditions and forecasts at the time of adoption. The amendments in this Update should be applied on a modified retrospective basis by means of a

cumulative-effect adjustment to the opening retained earnings balance in the statement of financial position as of the date that an entity adopted the amendments in Update 2016-13.

Standard: Transition Relief for the Implementation of ASU-2016-13 (ASU 2019-5: Financial Instruments – Credit Losses [Topic 326]: Targeted Transition Relief)

Description: The amendments in this ASU provide entities that have certain instruments within the scope of Subtopic 326-20, Financial Instruments – Credit Losses – Measured at Amortized Cost, with an option to irrevocably elect the fair value option in Subtopic 825-10, Financial Instruments – Overall, applied on an instrument-by-instrument basis for eligible instruments, upon adoption of Topic 326. The fair value option election does not apply to held-to-maturity debt securities. An entity that elects the fair value option should subsequently apply the guidance in Subtopics 820-10, Fair Value Measurement – Overall, and 825-10. General guidance for the use of the fair value option is contained in Subtopic 825-10. The irrevocable election of the fair value option must be applied on an instrument-by-instrument basis for eligible instruments, whose characteristics are within the scope of Subtopic 326-20. Upon adoption of Topic 326, for items measured at fair value in accordance with paragraph 326-10-65-1(i), the difference between the carrying amount and the fair value shall be recorded by means of a cumulative-effect adjustment to the opening retained earnings balance as of the beginning of the first reporting period that an entity has adopted ASU 2016-13. Those differences may include, but are not limited to: (1) unamortized deferred costs, fees, premiums, and discounts (2) valuation allowances (for example, allowance for loan losses), or (3) accrued interest.

Required Date of Implementation: See comments above related to ASU 2016-13.

Effect on Consolidated Financial Statements: See comments above related to ASU 2016-13.

Standard: Simplifying the Test for Goodwill Impairment (ASU 2017-04: Intangibles – Goodwill and Other [Topic 350]: Simplifying the Test for Goodwill Impairment)

Description: Current guidance requires a two-step approach to determining if recorded goodwill is impaired. In Step 1, reporting entities must first evaluate whether or not the carrying value of a reporting unit is greater than its fair value. In Step 2, if a reporting unit's carrying value is greater than its fair value, then the entity should calculate the implied fair value of goodwill. If the carrying value of goodwill is more than the implied fair value, an impairment charge for the difference must be recorded. The amended guidance eliminates Step 2 from the goodwill impairment test. Therefore, under the new guidance, if the carrying value of a reporting unit is greater than its fair value, a goodwill impairment charge will be recorded for the difference (up to the carrying value of the recorded goodwill).

Required Date of Implementation: January 1, 2020 (early adoption permitted).

Effect on Consolidated Financial Statements: The amendments should be applied using a prospective transition method. The Company does not expect the guidance will have a material impact on its consolidated financial statements, unless at some point in the future one of its reporting units were to fail Step 1 of the goodwill impairment test.

Standard: Fair Value Measurement (ASU 2018-13: Fair Value Measurement [Topic 820]: Disclosure Framework Changes to the Disclosure Requirements for Fair Value Measurement

Description: The FASB is issuing the amendments in this ASU as part of the disclosure framework project. The disclosure framework project's objective and primary focus are to improve the effectiveness of disclosures in the

notes to financial statements by facilitating clear communication of the information required by GAAP that is most important to users of each entity's financial statements. The amendments in this ASU modify the disclosure requirements for entities such as the Company on fair value measurements in Topic 820, Fair Value Measurement.

The following disclosure requirements were removed from Topic 820:

- 1. The amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy.
- 2. The policy for timing of transfers between levels.
- 3. The valuation processes for Level 3 fair value measurements.

The following disclosure requirements were modified in Topic 820:

- 1. For investments in certain entities that calculate net asset value, an entity is required to disclose the timing of liquidation of an investee's assets and the date when restrictions from redemption might lapse only if the investee has communicated the timing to the entity or announced the timing publicly.
- 2. The amendments clarify that the measurement uncertainty disclosure is to communicate information about the uncertainty in measurement as of the reporting date.

The following disclosure requirements were added to Topic 820:

- 1. The changes in unrealized gains and losses for the period included in other comprehensive income for recurring Level 3 fair value measurements held at the end of the reporting period.
- 2. The range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements. For certain unobservable inputs, an entity may disclose other quantitative information (such as the median or arithmetic average) in lieu of the weighted average if the entity determines that other quantitative information would be a more reasonable and rational method to reflect the distribution of unobservable inputs used to develop Level 3 fair value measurements.

Required Date of Implementation: The amendments in this ASU are effective for all entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. The amendments on changes in unrealized gains and losses, the range and weighted average of significant unobservable inputs used to develop Level 3 fair value measurements, and the narrative description of measurement uncertainty should be applied prospectively for only the most recent interim or annual period presented in the initial fiscal year of adoption. All other amendments should be applied retrospectively to all periods presented upon their effective date. Early adoption is permitted upon issuance of this Update. An entity is permitted to early adopt any removed or modified disclosures upon issuance of this ASU and delay adoption of the additional disclosures until their effective date.

Effect on Consolidated Financial Statements: The Company does not expect the new guidance will have a material impact to its consolidated statements of condition or income.

Standard: Compensation (ASU 2018-14: Compensation – Retirement Benefits – Defined Benefit Plans – General [Subtopic 715 – 20]: Disclosure Framework – Changes to the Disclosure Requirements for Defined Benefit Plans)

Description: The FASB is issuing the amendments in this ASU as part of the disclosure framework project. The amendments in this ASU modify the disclosure requirements for employers that sponsor defined benefit pension or other postretirement plans.

The following disclosure requirements are removed from Subtopic 715-20:

- 1. The amounts in accumulated other comprehensive income expected to be recognized as components of net periodic benefit cost over the next fiscal year.
- 2. The amount and timing of plan assets expected to be returned to the employer.
- 3. Related party disclosures about the amount of future annual benefits covered by insurance and annuity contracts and significant transactions between the employer or related parties and the plan.
- 4. The effects of a one-percentage-point change in assumed health care cost trend rates on the (a) aggregate of the service and interest cost components of net periodic benefit costs and (b) benefit obligation for postretirement health care benefits.

The following disclosure requirements are added to Subtopic 715-20:

- 1. The weighted-average interest crediting rates for cash balance plans and other plans with promised interest crediting rates.
- 2. An explanation of the reasons for significant gains and losses related to changes in the benefit obligation for the period.

The amendments in this ASU also clarify the disclosure requirements in paragraph 715-20-50-3, which state that the following information for defined benefit pension plans should be disclosed:

- 1. The projected benefit obligation (PBO) and fair value of plan assets for plans with PBOs in excess of plan assets.
- 2. The accumulated benefit obligation (ABO) and fair value of plan assets for plans with ABOs in excess of plan assets.

Required Date of Implementation: The amendments in this ASU are effective for fiscal years ending after December 15, 2020, for public business entities and for fiscal years ending after December 15, 2021, for all other entities. Early adoption is permitted for all entities.

Effect on Consolidated Financial Statements: The Company does not expect the new guidance will have a material impact to its consolidated statements of condition or income.

Standard: Leases (ASU 2019-01: Leases [Topic 842] Codification Improvements)

Description: On February 25, 2016, the FASB issued Accounting Standards ASU No. 2016-02, Leases [Topic 842], to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing essential information about leasing transactions. ASU 2019-01 addresses three Issues: (1) Determining the fair value of the underlying asset by lessors that are not manufacturers or dealers; (2) Presentation on the statement of cash flows for sales-type and direct financing leases; and (3) Transition disclosures related to Topic 250, *Accounting Changes and Error Corrections*.

The amendments in this ASU address Issue 1, described above, and reinstate the exception in Topic 842 for lessors that are not manufacturers or dealers (generally financial institutions and captive finance companies). Specifically, those lessors will use their cost, reflecting any volume or trade discounts that may apply, as the fair value of the underlying asset. However, if significant time lapses between the acquisition of the underlying asset and lease commencement, those lessors will be required to apply the definition of fair value (exit price) in Topic 820.

Topic 840 does not provide guidance on how cash received from leases by lessors from sales-type and direct financing leases should be presented in the cash flow statement. The amendments in this ASU address Issue 2,

described above, as to the concerns of lessors within the scope of Topic 942 about where "principal payments received under leases" should be presented. Specifically, lessors that are depository and lending institutions within the scope of Topic 942 will present all "principal payments received under leases" within investing activities in the Statement of Cash Flows.

Required Date of Implementation: The amendments in this ASU amend Topic 842. The effective date of those amendments for public business entities, such as the Company, is for fiscal years beginning after December 15, 2019 and interim periods within those fiscal years.

Effect on Consolidated Financial Statements: The Company does not expect that the new guidance will have a material impact to its consolidated statements of condition or income.

Standard: Various Codification Improvements (ASU 2019-04: Codification Improvements to Topic 326, Financial Instruments – Credit Losses, Topic 815, Derivatives and Hedging, and Topic 825, Financial Instruments)

Description: Since 2016, the FASB has issued the following Updates related to financial instruments:

- 1. Accounting Standards Update No. 2016-01, Financial Instruments Overall [Subtopic 825-10]: Recognition and Measurement of Financial Assets and Financial Liabilities;
- 2. Accounting Standards Update No. 2016-13, Financial Instruments Credit Losses [Topic 326]: Measurement of Credit Losses on Financial Instruments; and
- 3. Accounting Standards Update No. 2017-12, Derivatives and Hedging [Topic 815]: Targeted Improvements to Accounting for Hedging Activities.

The FASB has an ongoing project on its agenda for improving the Codification or correcting its unintended application. The items addressed in that project generally are not expected to have a significant effect on current accounting practice or to create a significant administrative cost for most entities. The amendments in this ASU are similar to those items and are summarized below.

For Codification Improvements specific to ASU 2016-01, the following topics were covered within ASU 2019-04:

- Scope Clarifications
- Held-to-Maturity Debt Securities Fair Value Disclosures
- Applicability of Topic 820 to the Measurement Alternative
- Remeasurement of Equity Securities at Historical Exchange Rates

The amendments to Topic 326 and other Topics in this Update include items related to the amendments in Update 2016-13 discussed at the June 2018 and November 2018 Credit Losses Transition Resource Group ("TRG") meetings. The amendments clarify or address stakeholders' specific issues about certain aspects of the amendments in Update 2016-13 on a number of different topics, including the following:

- Accrued Interest
- Transfers between Classifications or Categories for Loans and Debt Securities
- Recoveries
- Consideration of Prepayments in Determining the Effective Interest Rate
- Consideration of Estimated Costs to Sell When Foreclosure Is Probable

- Vintage Disclosures Line-of-Credit Arrangements Converted to Term Loans
- Contractual Extensions and Renewals

The ASU also covered a number of issues that related to hedge accounting (ASU-2017-12) including:

- Partial-Term Fair Value Hedges of Interest Rate Risk
- Amortization of Fair Value Hedge Basis Adjustments
- Disclosure of Fair Value Hedge Basis Adjustments
- Consideration of the Hedged Contractually Specified Interest Rate under the Hypothetical Derivative Method
- Scoping for Not-for-Profit Entities
- · Hedge Accounting Provisions Applicable to Certain Private Companies and Not-for- Profit Entities
- · Application of a First- Payments-Received Cash Flow Hedging Technique to Overall Cash Flows on a Group of Variable Interest Payments
- Transition Guidance

Required Dates of Implementation: This ASU 2019-04 has various implementation dates dependent on a number of factors as it pertains to the above items. The Company has adopted ASU 2016-01.

Effect on Consolidated Financial Statements: The Company does not expect that the new guidance will have a material impact to its consolidated statements of condition or income.

Standard: Investments (ASU 2020-01- Equity Securities [Topic 321], Investments – Equity Method and Joint Ventures [Topic 323], and Derivatives and Hedging [Topic 815] – Clarifying the Interactions between Topic 321, Topic 323, and Topic 815)

Description: The amendments in this Update clarify the interaction of the accounting for equity securities under Topic 321 and investments accounted for under the equity method of accounting in Topic 323 and the accounting for certain forward contracts and purchased options accounted for under Topic 815. The amendments clarify that an entity should consider observable transactions that require it to either apply or discontinue the equity method of accounting for the purposes of applying the measurement alternative in accordance with Topic 321 immediately before applying or upon discontinuing the equity method. The amendments clarify that for the purpose of applying paragraph 815-10-15-141(a) an entity should not consider whether, upon the settlement of the forward contract or exercise of the purchased option, individually or with existing investments, the underlying securities would be accounted for under the equity method in Topic 323 or the fair value option in accordance with the financial instruments guidance in Topic 825. An entity also would evaluate the remaining characteristics in paragraph 815-10-15-141 to determine the accounting for those forward contracts and purchased options.

Required Date of Implementation: The amendments in this ASU are effective for fiscal years ending after December 15, 2020, for public business entities and for fiscal years ending after December 15, 2021, for all other entities. Early adoption is permitted for all entities.

Effect on Consolidated Financial Statements: The amendments in this Update should be applied prospectively. The Company does not expect the new guidance will have a material impact to its consolidated statements of condition or income.

Standard: Income Taxes (ASU 2019-12- Simplifying the Accounting for Income Taxes)

Description: The FASB Board is issuing this Update as part of its initiative to reduce complexity in accounting standards (the Simplification Initiative). The objective of the Simplification Initiative is to identify, evaluate, and improve areas of generally accepted accounting principles (GAAP) for which cost and complexity can be reduced while maintaining or improving the usefulness of the information provided to users of financial statements. The specific areas of potential simplification in this Update were submitted by stakeholders as part of the Simplification Initiative.

The amendments in this Update simplify the accounting for income taxes by removing the following exceptions:

- 1. Exception to the incremental approach for intraperiod tax allocation when there is a loss from continuing operations and income or a gain from other items (for example, discontinued operations or other comprehensive income)
- 2. Exception to the requirement to recognize a deferred tax liability for equity method investments when a foreign subsidiary becomes an equity method investment
- 3. Exception to the ability not to recognize a deferred tax liability for a foreign subsidiary when a foreign equity method investment becomes a subsidiary
- 4. Exception to the general methodology for calculating income taxes in an interim period when a year-to-date loss exceeds the anticipated loss for the year.

The amendments in this Update also simplify the accounting for income taxes by doing the following:

- 1. Requiring that an entity recognize a franchise tax (or similar tax) that is partially based on income as an income-based tax and account for any incremental amount incurred as a non-income-based tax.
- 2. Requiring that an entity evaluate when a step up in the tax basis of goodwill should be considered part of the business combination in which the book goodwill was originally recognized and when it should be considered a separate transaction.
- 3. Specifying that an entity is not required to allocate the consolidated amount of current and deferred tax expense to a legal entity that is not subject to tax in its separate financial statements. However, an entity may elect to do so (on an entity-by-entity basis) for a legal entity that is both not subject to tax and disregarded by the taxing authority.
- 4. Requiring that an entity reflect the effect of an enacted change in tax laws or rates in the annual effective tax rate computation in the interim period that includes the enactment date.
- 5. Making minor Codification improvements for income taxes related to employee stock ownership plans and investments in qualified affordable housing projects accounted for using the equity method.

Required Date of Implementation: The amendments in this ASU are effective for fiscal years ending after December 15, 2020, for public business entities and for fiscal years ending after December 15, 2021, for all other entities. Early adoption of the amendments is permitted, including adoption in any interim period for (1) public business entities for periods for which financial statements have not yet been issued and (2) all other entities for periods for which financial statements have not yet been made available for issuance. An entity that elects to early adopt the amendments in an interim period should reflect any adjustments as of the beginning of the annual period that includes that interim period. Additionally, an entity that elects early adoption must adopt all the amendments in the same period.

Effect on Consolidated Financial Statements: The amendments in this Update related to separate financial statements of legal entities that are not subject to tax should be applied on a retrospective basis for all periods presented. The amendments related to changes in ownership of foreign equity method investments or foreign

subsidiaries should be applied on a modified retrospective basis through a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year of adoption. The amendments related to franchise taxes that are partially based on income should be applied on either a retrospective basis for all periods presented or a modified retrospective basis through a cumulative-effect adjustment to retained earnings as of the beginning of the fiscal year of adoption. All other amendments should be applied on a prospective basis. The Company does not expect the new guidance will have a material impact to its consolidated statements of condition or income.

Standard: Financial Instruments - Credit Losses (ASU 2019-11- Codification Improvements to Topic 326)

Description: On June 16, 2016, the FASB issued Accounting Standards Update No. 2016-13, Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which introduced an expected credit loss model for the impairment of financial assets measured at amortized cost basis. That model replaces the probable, incurred loss model for those assets. Through the amendments in that Update, the Board added Topic 326, Financial Instruments – Credit Losses, and made several consequential amendments to the Codification. The Board has an ongoing project on its agenda for improving the Codification or correcting its unintended application. The items addressed in that project generally are not expected to have a significant effect on current accounting practice or create a significant administrative cost for most entities. The amendments in this Update are similar to those items. However, the Board decided to issue a separate Update for improvements to the amendments in Update 2016-13 to increase stakeholder awareness of those amendments and to expedite the improvement process. The amendments include items brought to the Board's attention by stakeholders.

The amendments in this Update clarify or address stakeholders' specific issues about certain aspects of the amendments in Update 2016-13 as described below:

- 1. Expected Recoveries for Purchased Financial Assets with Credit Deterioration (PCDs): The amendments clarify that the allowance for credit losses for PCD assets should include in the allowance for credit losses expected recoveries of amounts previously written off and expected to be written off by the entity and should not exceed the aggregate of amounts of the amortized cost basis previously written off and expected to be written off by an entity. In addition, the amendments clarify that when a method other than a discounted cash flow method is used to estimate expected credit losses, expected recoveries should not include any amounts that result in an acceleration of the noncredit discount. An entity may include increases in expected cash flows after acquisition.
- 2. *Transition Relief for Troubled Debt Restructurings (TDRs)*: The amendments provide transition relief by permitting entities an accounting policy election to adjust the effective interest rate on existing TDRs using prepayment assumptions on the date of adoption of Topic 326 rather than the prepayment assumptions in effect immediately before the restructuring.
- 3. *Disclosures Related to Accrued Interest Receivables*: The amendments extend the disclosure relief for accrued interest receivable balances to additional relevant disclosures involving amortized cost basis.
- 4. *Financial Assets Secured by Collateral Maintenance Provisions:* The amendments clarify that an entity should assess whether it reasonably expects the borrower will be able to continually replenish collateral securing the financial asset to apply the practical expedient. The amendments clarify that an entity applying the practical expedient should estimate expected credit losses for any difference between the amount of the amortized cost basis that is greater than the fair value of the collateral securing the financial asset (that is, the unsecured portion of the amortized cost basis). An entity may determine that the expectation of nonpayment for the amount of the amortized cost basis equal to the fair value of the collateral securing the financial asset is zero.
- 5. *Conforming Amendment to* Subtopic 805-20: The amendment to Subtopic 805-20, Business Combinations Identifiable Assets and Liabilities, and Any Noncontrolling Interest, clarifies the

guidance by removing the cross-reference to Subtopic 310-30 in paragraph 805-20-50-1 and replacing it with a cross-reference to the guidance on PCD assets in Subtopic 326-20.

Required Date of Implementation: January 1, 2023 (early adoption permitted as of January 1, 2019. The effective dates and transition requirements for the amendments are the same as the effective dates and transition requirements in Update 2016-13.

Effect on Consolidated Financial Statements: The Company is assessing the new guidance to determine what modifications to existing credit estimation processes may be required. The new guidance is complex and management is still evaluating the preliminary output from models that have been developed during this evaluative phase. In addition, future levels of allowances will also reflect new requirements to include estimated credit losses on investment securities classified as held-to-maturity, if any. The Company has formed an Implementation Committee, whose membership includes representatives of senior management, to develop plans that will encompass: (1) internal methodology changes (2) data collection and management activities, (3) internal communication requirements, and (4) estimation of the projected impact of this guidance. It has been generally assumed that the conversion from the incurred loss model, required under current GAAP, to the CECL methodology will, more likely than not, result in increases to the allowances for credit losses at many financial institutions. However, the amount of any change in the allowance for credit losses resulting from the new guidance will ultimately be impacted by the provisions of this guidance as well as by the loan and debt security portfolios composition and asset quality at the adoption date, and economic conditions and forecasts at the time of adoption. The amendments in this Update should be applied on a modified retrospective basis by means of a cumulative-effect adjustment to the opening retained earnings balance in the statement of financial position as of the date that an entity adopted the amendments in Update 2016-13.

NOTE 3: EARNINGS PER SHARE

The Company entered into a securities purchase agreement with Castle Creek Capital Partners VII, L.P. on May 8, 2019, pursuant to which the Company sold: (i) 37,700 shares of the Company's common stock, par value \$0.01 per share, at a purchase price of \$14.25 per share; (ii) 1,155,283 shares of a new series of preferred stock, Series B convertible perpetual preferred stock, par value \$0.01 per share, at a purchase price of \$14.25 per share; and (iii) a warrant, with an approximate fair value of \$373,000, to purchase 125,000 shares of common stock at an exercise price equal to \$14.25 per share, in a Private Placement transaction for gross proceeds of approximately \$17.0 million. As a result of the securities purchase agreement, the Company has common stock, preferred stock and a warrant that are all eligible to participate in dividends equal to the common stock dividends on a per share basis. Securities that participate in dividends, such as the Company's preferred stock and warrant, are considered "participating securities." The Company calculates net income available to common shareholders using the two-class method required for capital structures that include participating securities.

In applying the two-class method for the year ended December 31, 2019, basic net income per share was calculated by dividing net income (less any dividends on participating securities) by the weighted average number of shares of common stock and participating securities outstanding for the period. Diluted earnings per share may include the additional effect of other securities, if dilutive, in which case the dilutive effect of such securities is calculated by applying either the two-class method or the Treasury Stock method to the assumed exercise or vesting of potentially dilutive common shares. The method yielding the more dilutive result is ultimately reported for the applicable period. Potentially dilutive common stock equivalents primarily consist of employee stock options and restricted stock units. Unallocated common shares held by the ESOP are not included in the weighted average number of common shares outstanding for purposes of calculating earnings per common share until they are committed to be released to plan participants.

Basic earnings per share for the year ended December 31, 2018 was calculated by dividing net income available to common shareholders by the weighted average number of common shares outstanding during the period. Net income available to common shareholders is net income to Pathfinder Bancorp, Inc. less the total of preferred

dividends declared, if any. Diluted earnings per share include the potential dilutive effect that could occur upon the assumed exercise of issued stock options using the Treasury Stock method. Unallocated common shares held by the ESOP are not included in the weighted average number of common shares outstanding for purposes of calculating earnings per common share until they are committed to be released to plan participants.

Anti-dilutive shares are common stock equivalents with average exercise prices in excess of the weighted average market price for the period presented. Anti-dilutive stock options, not included in the computation below, were -0- for the years ended 2019 and 2018.

The following table sets forth the calculation of basic and diluted earnings per share.

		ended aber 31,
(In thousands, except per share data)	2019	2018
Net income attributable to Pathfinder Bancorp, Inc.	\$4,276	\$4,031
Convertible preferred stock dividends	208	_
Warrant dividends	23	_
Undistributed earnings allocated to participating securities	467	
Net income available to common shareholders	\$3,578	\$4,031
Basic weighted average common shares outstanding	4,464	4,171
Effect of assumed exercise of stock options and unvested restricted stock units	_	95
Diluted weighted average common shares outstanding	4,464	4,266
Basic earnings per common share	\$ 0.80	\$ 0.97
Diluted earnings per common share	\$ 0.80	\$ 0.94

NOTE 4: INVESTMENT SECURITIES

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

			r 31, 2019	
(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Available-for-Sale Portfolio				
Debt investment securities:				
US Treasury, agencies and GSEs	\$ 16,850	\$ —	\$ (30)	\$ 16,820
State and political subdivisions	1,735	1	_	1,736
Corporate	12,347	230	(23)	12,554
Asset backed securities	13,190	61	(19)	13,232
Residential mortgage-backed – US agency	19,012	56	(88)	18,980
Collateralized mortgage obligations – US agency	31,320	35	(570)	30,785
Collateralized mortgage obligations – Private label	16,767	97	(43)	16,821
Total	111,221	480	(773)	110,928
Equity investment securities:				
Common stock – financial services industry	206			206
Total	206			206
Total available-for-sale	\$111,427	\$ 480	\$ (773)	\$111,134

			er 31, 2019	
	Amortized	Gross Unrealized	Gross Unrealized	Estimated
(In thousands)	Cost	Gains	Losses	Fair Value
Held-to-Maturity Portfolio				
Debt investment securities:				
US Treasury, agencies and GSEs	\$ 1,998	\$ 2	\$ —	\$ 2,000
State and political subdivisions	8,534	124	(4)	8,654
Corporate	25,779	584	(29)	26,334
Asset backed securities	23,099	101	(115)	23,085
Residential mortgage-backed – US agency	13,715	247	(3)	13,959
Collateralized mortgage obligations – US agency	19,607	300	(29)	19,878
Collateralized mortgage obligations – Private label	30,256	35	(53)	30,238
Total held-to-maturity	\$122,988	\$ 1,393	\$ (233)	\$124,148
			er 31, 2018	
(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Available-for-Sale Portfolio				
Debt investment securities:				
US Treasury, agencies and GSEs	\$ 17,171	\$ 18	\$ (158)	\$ 17,031
State and political subdivisions	23,661	6	(602)	23,065
Corporate	17,389	220	(409)	17,200
Asset backed securities	18,243	13	(137)	18,119
Residential mortgage-backed – US agency	32,409	34	(777)	31,666
Collateralized mortgage obligations – US agency	48,101	31	(1,691)	46,441
Collateralized mortgage obligations – Private label	24,317	17	(398)	23,936
Total	181,291	339	(4,172)	177,458
Equity investment securities:			(:,=:=)	
Common stock – financial services industry	206	_	_	206
Total	206			206
			<u> </u>	
Total available-for-sale	<u>\$181,497</u>	\$ 339	\$ (4,172)	\$177,664
Held-to-Maturity Portfolio				
Debt investment securities:				
US Treasury, agencies and GSEs	\$ 3,987	\$ —	\$ (35)	\$ 3,952
State and political subdivisions	5,089	22	(84)	5,027
Corporate	9,924	4	(182)	9,746
Asset backed securities	1,509		(13)	1,496
Residential mortgage-backed – US agency	11,601	124	(47)	11,678
Collateralized mortgage obligations – US agency	13,972	93	(13)	14,052
Collateralized mortgage obligations – Private label	7,826	17	(25)	7,818
Total held-to-maturity	\$ 53,908	\$ 260	\$ (399)	\$ 53,769

The majority of the Company's investments in mortgage-backed securities include pass-through securities and collateralized mortgage obligations issued and guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae. At December 31, 2019, the Company also held a total of 33 private-label mortgage-backed securities or collateralized mortgage obligations with an aggregate book balance of \$47.0 million and 23 private-label asset backed securities collateralized by consumer loans with an aggregate book balance of \$36.3 million. At December 31, 2018, the Company held a total of 21 private-label mortgage-backed securities or collateralized

mortgage obligations with an aggregate book balance of \$32.1 million and 14 private-label asset backed securities collateralized by consumer loans with an aggregate book balance of \$19.8 million. These investments are relatively short-duration securities with significant credit enhancements. The Company's investments in state and political obligation securities are generally municipal obligations that are categorized as general obligations of the issuer that are supported by the overall taxing authority of the issuer, and in some cases are insured. The obligations issued by school districts are generally supported by state administered insurance funds or credit enhancement programs.

The amortized cost and estimated fair value of debt investments at December 31, 2019 by contractual maturity are shown below. Expected maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without penalties.

	Available	e-for-Sale	Held-to-	Maturity
	Amortized	Estimated	Amortized	Estimated
(In thousands)	Cost	Fair Value	Cost	Fair Value
Due in one year or less	\$ 10,252	\$ 10,250	\$ 1,308	\$ 1,312
Due after one year through five years	11,452	11,620	24,674	24,947
Due after five years through ten years	15,809	15,854	17,540	17,945
Due after ten years	6,609	6,618	15,888	15,869
Sub-total	44,122	44,342	59,410	60,073
Residential mortgage-backed – US agency	19,012	18,980	13,715	13,959
Collateralized mortgage obligations – US agency	31,320	30,785	19,607	19,878
Collateralized mortgage obligations – Private label	16,767	16,821	30,256	30,238
Totals	\$ 111,221	\$ 110,928	\$ 122,988	\$ 124,148

The Company's investment securities' gross unrealized losses and fair value, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position, is as follows:

				D	ecember 31, 20	19			
	Less	than Twelve M	lonths	Twe	lve Months or N	More	Total		
	Number of			Number of			Number of		
(Dollars in thousands)	Individual	Unrealized	Fair	Individual	Unrealized	Fair	Individual	Unrealized	Fair
	Securities	Losses	Value	Securities	Losses	Value	Securities	Losses	Value
Available-for-Sale Portfolio									
US Treasury, agencies and GSE's	4	\$ (30)	\$16,820	_	\$ —	\$ —	4	\$ (30)	\$16,820
Corporate	1	(23)	786	_	_	_	1	(23)	786
Asset backed securities	3	(7)	5,211	1	(12)	594	4	(19)	5,805
Residential mortgage-backed – US agency	10	(77)	10,709	4	(11)	2,543	14	(88)	13,252
Collateralized mortgage obligations – US									
agency	10	(67)	15,791	10	(503)	10,034	20	(570)	25,825
Collateralized mortgage obligations –									
Private label	2	(7)	3,818	5	(36)	3,959	7	(43)	7,777
Totals	30	\$ (211)	\$53,135	20	\$ (562)	\$17,130	50	\$ (773)	\$70,265

					I	Deceml	ber 31, 20	19				
		than Twe	lve Mo	onths			Ionths or N	More			Total	
(Dollars in thousands)	Number of Individual Securities	Unreal Loss		Fair Value	Number of Individual Securities	Ur	nrealized Losses	Fair Value	Number of Individual Securities		realized osses	Fair Value
Held-to-Maturity Portfolio												
State and political subdivisions	1	\$	(4)	3,027	_	\$	_	_	1	\$	(4)	3,027
Corporate	2		(29)	2,974	_		_	_	2		(29)	2,974
Asset backed securities	6	(115)	11,091	_		_	_	6		(115)	11,091
Residential mortgage-backed – US agency	_	-	_	_	1		(3)	198	1		(3)	198
Collateralized mortgage obligations – US												
agency	2		(29)	4,907	_		_	_	2		(29)	4,907
Collateralized mortgage obligations – Private												
label	6		(49)	9,396	2		(4)	1,132	8		(53)	10,528
Totals	17	\$ (2	226)	\$31,395	3	\$	(7)	\$1,330	20	\$	(233)	\$32,725
						_						
					D	ecemb	er 31, 201	.8				
		han Twelv	e Mor	nths	Twel		oer 31, 201 onths or M			Т	otal	
	Less the Number of Individual	han Twely Unrealiz		nths Fair		ve Mo			Number of Individual		Total alized	
(Dollars in thousands)	Number of		ed		Twel Number of	ve Mo Unre	onths or M	ore		Unre		Fair Value
Available-for-Sale Portfolio	Number of Individual	Unrealiz Losses	ed i	Fair Value	Twel Number of Individual Securities	Ve Mo Unre Lo	ealized esses	ore Fair Value	Individual Securities	Unre Lo	alized sses	
Available-for-Sale Portfolio US Treasury, agencies and GSE's	Number of Individual Securities	Unrealiz Losses \$ (2	ed 5	Fair Value	Twel Number of Individual Securities	Unre Lo	ealized osses (136)	Fair Value \$12,017	Individual Securities	Unre Lo	alized sses (158)	\$ 12,994
Available-for-Sale Portfolio	Number of Individual	Unrealiz Losses \$ (2	ed i	Fair Value \$ 977 5,213	Twel Number of Individual Securities	Unre Lo	ealized esses	ore Fair Value	Individual Securities	Unre Lo	alized sses	
Available-for-Sale Portfolio US Treasury, agencies and GSE's State and political subdivisions Corporate	Number of Individual Securities 1 5 10	Unrealiz Losses \$ (2	ed 5 22) 76)	Fair Value	Twel Number of Individual Securities	Unre Lo	ealized osses (136)	Fair Value \$12,017 14,206 3,374	Individual Securities 3 31 14	Unre Lo	alized sses (158)	\$ 12,994 19,419 11,640
Available-for-Sale Portfolio US Treasury, agencies and GSE's State and political subdivisions Corporate Asset backed securities	Number of Individual Securities 1 5	Unrealiz Losses \$ (2 (12	ed (22) (76) (37) (91)	Fair Value \$ 977 5,213 8,266 10,470	Twel Number of Individual Securities 2 26 4 2	Unre Lo \$	(136) (526) (272) (46)	Fair Value \$12,017 14,206 3,374 3,059	Individual Securities 3 31 14 9	Unre Lo:	alized sses (158) (602) (409) (137)	\$ 12,994 19,419
Available-for-Sale Portfolio US Treasury, agencies and GSE's State and political subdivisions Corporate Asset backed securities Residential mortgage-backed – US agency	Number of Individual Securities 1 5 10	Unrealiz Losses \$ (2 (12	ed (22) (76) (37)	Fair Value \$ 977 5,213 8,266	Twel Number of Individual Securities 2 26 4	Unre Lo \$	ealized ssses (136) (526) (272)	Fair Value \$12,017 14,206 3,374	Individual Securities 3 31 14	Unre Lo:	alized sses (158) (602) (409)	\$ 12,994 19,419 11,640
Available-for-Sale Portfolio US Treasury, agencies and GSE's State and political subdivisions Corporate Asset backed securities	Number of Individual Securities 1 5 10 7	Unrealiz Losses \$ (2 (12	ed (22) (76) (37) (91)	Fair Value \$ 977 5,213 8,266 10,470	Twel Number of Individual Securities 2 26 4 2	Unre Lo \$	(136) (526) (272) (46)	Fair Value \$12,017 14,206 3,374 3,059	Individual Securities 3 31 14 9	Unre Lo:	alized sses (158) (602) (409) (137)	\$ 12,994 19,419 11,640 13,529
Available-for-Sale Portfolio US Treasury, agencies and GSE's State and political subdivisions Corporate Asset backed securities Residential mortgage-backed – US agency Collateralized mortgage obligations – US agency	Number of Individual Securities 1 5 10 7	Unrealiz Losses \$ (2 (12 (12 (12 (12 (12 (12 (12 (12 (12	ed (22) (76) (37) (91)	Fair Value \$ 977 5,213 8,266 10,470	Twel Number of Individual Securities 2 26 4 2	ve Mo Unre Lo	(136) (526) (272) (46)	Fair Value \$12,017 14,206 3,374 3,059	Individual Securities 3 31 14 9	Unre Lo	alized sses (158) (602) (409) (137)	\$ 12,994 19,419 11,640 13,529
Available-for-Sale Portfolio US Treasury, agencies and GSE's State and political subdivisions Corporate Asset backed securities Residential mortgage-backed – US agency Collateralized mortgage obligations – US agency Collateralized mortgage obligations –	Number of Individual Securities 1 5 10 7 6	Unrealiz Losses \$ (2 (12 (12 (12 (12 (12 (12 (12 (12 (12	ed (22) (76) (37) (91) (33)	Fair Value \$ 977 5,213 8,266 10,470 3,519	Twel Number of Individual Securities 2 26 4 2 21	ve Mo Unre Lo	(136) (526) (272) (46) (694)	Fair Value \$12,017 14,206 3,374 3,059 24,154 35,765	Individual Securities 3 31 14 9 27	Unre Lo	alized sses (158) (602) (409) (137) (777)	\$ 12,994 19,419 11,640 13,529 27,673 38,557
Available-for-Sale Portfolio US Treasury, agencies and GSE's State and political subdivisions Corporate Asset backed securities Residential mortgage-backed – US agency Collateralized mortgage obligations – US agency	Number of Individual Securities 1 5 10 7 6	Unrealiz Losses \$ (2 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	ed (22) (76) (37) (91) (33)	Fair Value \$ 977 5,213 8,266 10,470 3,519	Twel Number of Individual Securities 2 26 4 2 21	ve Mo Unre Lo	(136) (526) (272) (46) (694)	Fair Value \$12,017 14,206 3,374 3,059 24,154	Individual Securities 3 31 14 9 27	Unre Lo	alized sses (158) (602) (409) (137) (777)	\$ 12,994 19,419 11,640 13,529 27,673
Available-for-Sale Portfolio US Treasury, agencies and GSE's State and political subdivisions Corporate Asset backed securities Residential mortgage-backed – US agency Collateralized mortgage obligations – US agency Collateralized mortgage obligations –	Number of Individual Securities 1 5 10 7 6	Unrealiz Losses \$ (2 (1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	ed (22) (76) (37) (91) (33) (98)	Fair Value \$ 977 5,213 8,266 10,470 3,519 2,792	Twel Number of Individual Securities 2 26 4 2 21 28	Unre Lo \$	(136) (526) (272) (46) (694)	Fair Value \$12,017 14,206 3,374 3,059 24,154 35,765	1 14 9 27 31	Unre Lo \$	(158) (602) (409) (137) (777)	\$ 12,994 19,419 11,640 13,529 27,673 38,557

]	Decen	nber 31, 201	18			
	Less	than Tw	elve Mo	nths	Tw	elve N	Months or N	lore		Total	
(Dollars in thousands)	Number of Individual Securities	Unrea Los	alized sses	Fair Value	Number of Individual Securities		nrealized Losses	Fair Value	Number of Individual Securities	Unrealized Losses	Fair Value
Held-to-Maturity Portfolio											
US Treasury, agencies and GSE's	1	\$	(8)	\$ 982	3	\$	(27)	\$ 2,970	4	\$ (35)	\$ 3,952
State and political subdivisions			_	_	6		(84)	2,310	6	(84)	2,310
Corporate	4		(41)	3,214	. 2		(141)	2,507	6	(182)	5,721
Asset backed securities	1		(13)	1,496	_		_	_	1	(13)	1,496
Residential mortgage-backed – US agency	3		(8)	1,447	2		(39)	1,769	5	(47)	3,216
Collateralized mortgage obligations – US											
agency	4		(13)	3,972	_		_	_	4	(13)	3,972
Collateralized mortgage obligations –											
Private label					2		(25)	1,874	2	(25)	1,874
Totals	13	\$	(83)	\$11,111	15	\$	(316)	\$11,430	28	\$ (399)	\$22,541

The Company conducts a formal review of investment securities on a quarterly basis for the presence of OTTI. The Company assesses whether OTTI is present when the fair value of a debt security is less than its amortized cost basis at the statement of condition date. Under these circumstances, OTTI is considered to have occurred (1) if we intend to sell the security; (2) if it is "more likely than not" we will be required to sell the security before recovery of its amortized cost basis; or (3) the present value of expected cash flows is not anticipated to be sufficient to recover the entire amortized cost basis. The guidance requires that credit-related OTTI is recognized in earnings while non-credit-related OTTI on securities not expected to be sold is recognized in other comprehensive income ("OCI"). Non-credit-related OTTI is based on other factors, including illiquidity and changes in the general interest rate environment. Presentation of OTTI is made in the consolidated statement of income on a gross basis, including both the portion recognized in earnings as well as the portion recorded in OCI. The gross OTTI would then be offset by the amount of non-credit-related OTTI, showing the net as the impact on earnings.

Management does not believe any individual unrealized loss in other securities within the portfolio as of December 31, 2019 represents OTTI. There were a total of 20 securities classified as available-for-sale and 3 securities classified as held-to-maturity that were in an unrealized loss position for 12 months or longer at December 31, 2019. Each security which has been in an unrealized loss position for 12 months or more has been analyzed and is not considered to be impaired. These securities have unrealized losses primarily due to changes in general interest rates that occurred since the securities were acquired or due to changes in certain assumptions related to the securities' such as the timing of projected prepayment activity. Of the 23 securities in an unrealized loss position for 12 months or more at December 31, 2019, 15 securities, representing 69.8% of the amortized cost of the total securities in an unrealized loss position for 12 months or more, are issued by United States agencies or government sponsored enterprises and consist of mortgage-backed securities, collateralized mortgage obligations and direct agency financings. These positions in US government agency and government-sponsored enterprises are deemed to have no credit impairment, thus, the disclosed unrealized losses relate primarily to changes in interest rates subsequent to the acquisition of the individual securities. In addition to these securities, the Company held the following issuances that were in an unrealized loss position for 12 or more months at December 31, 2019:

One privately-issued asset-backed security, categorized as available-for-sale, with an amortized historical cost of \$606,000 and a fair value of \$594,000 (unrealized loss of \$12,000, or 2.06%). This security maintains a credit

rating established by one or more NRSRO above the minimum level required to be considered as investment grade and therefore, no credit-related OTTI is deemed to be present.

Five privately-issued collateralized mortgage obligation securities, categorized as available-for-sale, with an aggregate amortized historical cost of \$3.9 million and an aggregate fair value of \$3.9 million (aggregate unrealized loss of \$36,000, or 0.92%). These securities were not rated at the time of their issuances by any NRSRO but each security remains significantly collateralized through subordination. Therefore, no credit-related OTTI is deemed to be present.

Two privately-issued collateralized mortgage obligation securities, categorized as held-to-maturity, with aggregate amortized historical cost of \$1.1 million and an aggregate fair value of \$1.1 million (aggregate unrealized loss of \$4,000, or 0.35%). These securities were not rated at the time of their issuance by any NRSRO but each security remains significantly collateralized through subordination. Therefore, no credit-related OTTI is deemed to be present.

The Company does not intend to sell any of the securities in an unrealized loss position for 12 or months nor is it more likely than not that the Company will be required to sell these securities prior to the recovery of the amortized cost.

Proceeds of \$103.0 million and \$35.6 million, respectively on sales and redemptions of securities for the years ended December 31 resulted in gross realized gains (losses) detailed below:

(In thousands)	2019	2018
Realized gains on investments	\$ 707	\$ 242
Realized losses on investments	(378)	(424)
	\$ 329	\$(182)

As of December 31, 2019 and December 31, 2018, securities with a fair value of \$92.4 million and \$69.8 million, respectively, were pledged to collateralize certain municipal deposit relationships. As of the same dates, securities with a fair value of \$21.3 million and \$19.5 million were pledged against certain borrowing arrangements.

Management has reviewed its loan and mortgage-backed securities portfolios and determined that, to the best of its knowledge, little or no exposure exists to sub-prime or other high-risk residential mortgages. The Company is not in the practice of investing in, or originating, these types of investments or loans.

NOTE 5: LOANS

Major classifications of loans are as follows:

(In thousands)	December 31, 2019	December 31, 2018
Residential mortgage loans:		
1-4 family first-lien residential mortgages	\$ 209,559	\$ 232,523
Construction	3,963	7,121
Loans held-for-sale (1)	35,790	
Total residential mortgage loans	249,312	239,644
Commercial loans:		
Real estate	254,257	212,314
Lines of credit	58,617	44,235
Other commercial and industrial	82,092	63,359
Tax exempt loans	8,067	9,320
Total commercial loans	403,033	329,228
Consumer loans:		
Home equity and junior liens	46,389	26,109
Other consumer	82,607	25,424
Total consumer loans	128,996	51,533
Total loans	781,341	620,405
Net deferred loan fees	110	(135)
Less allowance for loan losses	(8,669)	(7,306)
Loans receivable, net	\$ 772,782	\$ 612,964

(1) Based on ASC 948, Mortgage Banking, loans shall be classified as held-for-sale once a decision has been made to sell the loans and shall be transferred to the held-for-sale category at lower of cost or fair value. The loans under contract to be sold had a principal balance of \$35.8 million and net deferred fees of \$146,000 at December 31, 2019. These loans were transferred at their amortized cost of \$35.9 million as of December 31, 2019, as the fair value of these loans was greater than the amortized cost.

The Bank may occasionally purchase or fund loan participation interests in commercial real estate that are outside of its primary market areas, however, the Bank almost exclusively originates residential mortgage, commercial business, and consumer loans to customers throughout Oswego, NY and Onondaga, NY and the surrounding counties. The Company has what management considers to be a well-diversified loan portfolio. However, a substantial portion of its borrowers' abilities to honor their contracts is dependent upon the counties' general employment and economic conditions.

In addition, the Bank will, from time to time, purchase aggregated pools of homogenous consumer or commercial business loans from unaffiliated third parties. These purchases are made primarily as an alternative to investment in debt securities. The following summarizes the Bank's positions in these acquisitions at December 31, 2019 and December 31, 2018:

The Bank acquired \$15.6 million, \$10.2 million and \$24.6 million of loans originated by an unrelated financial institution, located outside of the Bank's market area, in January 2017, April 2017, and March 2019, respectively. The acquired loan pools represented a 90% participating interest in a total of 2,283 loans secured by liens on automobiles with original maturities ranging primarily from two to six years. These loans will be serviced through their respective maturities by the originating financial institution. At December 31, 2019 and December 31, 2018, there were 1,657 loans outstanding with a remaining carrying value of \$27.2 million, and

909 loans outstanding with a remaining outstanding carrying value of \$13.3 million, respectively. The unamortized premium included in the carrying value At December 31, 2019 and December 31, 2018 was \$930,000 and \$534,000, respectively. Since the acquisition of these loan pools, a total of 29 loans had cumulative net charge-offs totaling \$196,000 with \$77,000 in net charge-offs occurring in the twelve months ended December 31, 2019.

The Bank acquired a \$5.0 million pool of consumer loans and \$5.0 million pool of commercial and industrial loans originated by an unrelated financial institution, located outside of the Bank's market area, in June 2019. In December 2019, the Bank acquired an additional \$1.8 million in commercial and industrial loans and \$392,000 of consumer loans from the same institution. The acquired loan pools represented a 100% interest in a total of 89 unsecured consumer loans and a total of 43 commercial and industrial loans. These loans have maturities ranging primarily from four to ten years. At December 31, 2019 there were 87 unsecured consumer loans outstanding with a remaining outstanding carrying value of \$5.0 million and 43 commercial and industrial loans outstanding with a remaining outstanding carrying value of \$6.6 million. These loans have no unamortized premium or discount included in the carrying value. No charge-offs have occurred since the acquisition of these loan pools.

The Bank acquired a \$21.9 million pool of home equity lines of credit originated by an unrelated financial technology company, located outside of the Bank's market area, in August 2019. The acquired loan pool represented a 100% interest in a total of 395 secured home equity lines of credit. These lines of credit have maturities ranging primarily from four to thirty years. These lines of credit will be serviced through their respective maturities by the originating financial technology company. At December 31, 2019, there were 376 secured home equity lines of credit outstanding with a remaining outstanding carrying value of \$20.1 million. The unamortized premium included in the carrying value at December 31, 2019 was \$390,000. No charge-offs have occurred since the acquisition of these loan pools.

The Bank acquired a \$26.6 million pool of unsecured consumer loans originated by an unrelated financial technology company, located outside of the Bank's market area, in November 2019. The acquired loan pool represents a 59.2% interest in a total of 2,787 unsecured consumer loans. These loans have maturities ranging primarily from three to five years. These loans will be serviced through their respective maturities by the originating unrelated financial technology company. At December 31, 2019, there were 2,768 unsecured consumer loans outstanding with a remaining outstanding carrying value of \$25.8 million. The unamortized premium included in the carrying value at December 31, 2019 was \$114.000. No charge-offs have occurred since the acquisition of these loan pools.

The Bank acquired a \$10.3 million pool of unsecured consumer loans originated by an unrelated financial technology company, located outside of the Bank's market area, in December 2019. The acquired loan pool represents a 100% interest in a total of 4,259 unsecured consumer loans. These loans have maturities ranging primarily from less than one year to three to seven years. These loans will be serviced through their respective maturities by the originating unrelated financial technology company. At December 31, 2019, there were 4,259 unsecured consumer loans outstanding with a remaining outstanding carrying value of \$10.3 million. The unamortized premium included in the carrying value at December 31, 2019 was \$245,000. No charge-offs have occurred since the acquisition of these loan pools.

The Bank acquired a \$2.1 million pool of secured first lien residential mortgages originated by an unrelated non-profit housing and community development organization, located within the Bank's market area, in December 2019. The acquired loan pool represents a 100% interest in a total of 25 secured first lien residential mortgages. These loans have maturities ranging primarily from 22 to 24 years. These loans will be serviced through their respective maturities by the unrelated non-profit housing and community development organization. At December 31, 2019, there were 25 unsecured consumer loans outstanding with a remaining outstanding carrying value of \$2.1 million. The unamortized premium included in the carrying value at December 31, 2019 was \$135,000. No charge-offs have occurred since the acquisition of these loan pools.

As of December 31, 2019 and December 31, 2018, residential mortgage loans with a carrying value of \$136.9 million and \$154.9 million, respectively, have been pledged by the Company to the Federal Home Loan Bank of New York ("FHLBNY") under a blanket collateral agreement to secure the Company's line of credit and term borrowings.

Loan Origination / Risk Management

The Company has lending policies and procedures in place that are designed to maximize loan income within an acceptable level of risk. Management and the board of directors reviews and approves these policies and procedures on a regular basis. A reporting system supplements the review process by frequently providing management with reports related to loan production, loan quality, loan delinquencies, nonperforming and potential problem loans. Diversification in the loan portfolio is also a means of managing risk associated with fluctuations in economic conditions. Homogenous pools of purchased loans are subject to substantial prepurchase analyses led by a team of the Bank's senior executives and credit analysts. In each case, the Bank's analytical processes consider the types of loans being evaluated, the underwriting criteria employed by the originating entity, the historical performance of such loans, especially in the most recent deeply recessionary environments, the collateral enhancements and other credit loss mitigation factors offered by the seller and the capabilities and financial stability of the servicing entities involved. From a credit risk perspective, these loan pools also benefit from broad diversification, including wide geographic dispersion, the readily-verifiable historical performance of similar loans issued by the originators, as well as the overall experience and skill of the underwriters and servicing entities involved as counterparties to the Bank in these transactions. The performance of all purchased loan pools are monitored regularly from detailed reports and remittance reconciliations provided at least monthly by the servicing entities.

Risk Characteristics of Portfolio Segments

Each portfolio segment generally carries its own unique risk characteristics.

The residential mortgage loan segment is impacted by general economic conditions, unemployment rates in the Bank's service area, real estate values and the forward expectation of improvement or deterioration in economic conditions. First and second lien residential mortgages, acquired via purchase are impacted by general economic conditions, unemployment rates in the general areas in which the loan collateral is located, real estate values in those areas and the forward expectation of improvement or deterioration in economic conditions.

The commercial loan segment is impacted by general economic conditions but, more specifically, the industry segment in which each borrower participates. Unique competitive changes within a borrower's specific industry, or geographic location could cause significant changes in the borrower's revenue stream, and therefore, impact its ability to repay its obligations. Commercial real estate is also subject to general economic conditions but changes within this segment typically lag changes seen within the consumer and commercial segment. Included within this portfolio are both owner occupied real estate, in which the borrower occupies the majority of the real estate property and upon which the majority of the sources of repayment of the obligation is dependent upon, and non-owner occupied real estate, in which several tenants comprise the repayment source for this portfolio segment. The composition and competitive position of the tenant structure may cause adverse changes in the repayment of debt obligations for the non-owner occupied class within this segment.

The consumer loan segment is impacted by general economic conditions, unemployment rates in the geographic areas in which borrowers and loan collateral are located, and the forward expectation of improvement or deterioration in economic conditions.

Real estate loans, including residential mortgages, commercial real estate loans and home equity, comprise 70% of the portfolio in 2019, similar to the composition in 2018, where such loans represented 77% of total loans. Loans secured by real estate generally provide strong collateral protection and thus significantly reduce the inherent credit risk in the portfolio.

Management has reviewed its loan portfolio and determined that, to the best of its knowledge, little or no exposure exists to sub-prime or other high-risk residential mortgages. The Company is not in the practice of originating these types of loans.

Description of Credit Quality Indicators

The Company utilizes an eight tier risk rating system to evaluate the quality of its loan portfolio. Loans that are risk rated "1" through "4" are considered "Pass" loans. In accordance with regulatory guidelines, loans rated "5" through "8" are termed "criticized" loans and loans rated "6" through "8" are termed "classified" loans. A description of the Company's credit quality indicators follows.

For Commercial Loans:

- 1. <u>Prime</u>: A loan that is fully secured by properly margined Pathfinder Bank deposit account(s) or an obligation of the US Government. It may also be unsecured if it is supported by a very strong financial condition and, in the case of a commercial loan, excellent management. There exists an unquestioned ability to repay the loan in accordance with its terms.
- 2. <u>Strong</u>: Desirable relationship of somewhat less stature than Prime grade. Possesses a sound documented repayment source, and back up, which will allow repayment within the terms of the loan. Individual loans backed by solid assets, character and integrity. Ability of individual or company management is good and well established. Probability of serious financial deterioration is unlikely.
- 3. <u>Satisfactory</u>: Stable financial condition with cash flow sufficient for debt service coverage. Satisfactory loans of average strength having some deficiency or vulnerability to changing economic or industry conditions but performing as agreed with documented evidence of repayment capacity. May be unsecured loans to borrowers with satisfactory credit and financial strength. Satisfactory provisions for management succession and a secondary source of repayment exists.
- 4. <u>Satisfactory Watch:</u> A four is not a criticized or classified credit. These credits do not display the characteristics of a criticized asset as defined by the regulatory definitions. A credit is given a Satisfactory Watch designation if there are matters or trends observed deserving attention somewhat beyond normal monitoring. Borrowing obligations may be handled according to agreement but could be adversely impacted by developing factors such as industry conditions, operating problems, pending litigation of a significant nature or declining collateral quality and adequacy.
- 5. <u>Special Mention</u>: A warning risk grade that portrays one or more weaknesses that may be tolerated in the short term. Assets in this category are currently protected but are potentially weak. This loan would not normally be booked as a new credit, but may have redeeming characteristics persuading the Bank to continue working with the borrower. Loans accorded this classification have potential weaknesses which may, if not checked or corrected, weaken the company's assets, inadequately protect the Bank's position or effect the orderly, scheduled reduction of the debt at some future time.
- 6. <u>Substandard</u>: The relationship is inadequately protected by the current net worth and cash flow capacity of the borrower, guarantor/endorser, or of the collateral pledged. Assets have a well-defined weakness or weaknesses that jeopardize the orderly liquidation of the debt. The relationship shows deteriorating trends or other deficient areas. The loan may be nonperforming and expected to remain so for the foreseeable future. Relationship balances may be adequately secured by asset value; however a deteriorated financial condition may necessitate collateral liquidation to effect repayment. This would also include any relationship with an unacceptable financial condition requiring excessive attention of the officer due to the nature of the credit risk or lack of borrower cooperation.
- 7. <u>Doubtful</u>: The relationship has all the weaknesses inherent in a credit graded 5 with the added characteristic that the weaknesses make collection on the basis of currently existing facts, conditions and value, highly questionable or improbable. The possibility of some loss is extremely high, however

its classification as an anticipated loss is deferred until a more exact determination of the extent of loss is determined. Loans in this category must be on nonaccrual.

8. <u>Loss</u>: Loans are considered uncollectible and of such little value that continuance as bankable assets is not warranted. It is not practicable or desirable to defer writing off this basically worthless asset even though partial recovery may be possible in the future.

For Residential Mortgage and Consumer Loans:

Residential mortgage and consumer loans are assigned a "Pass" rating unless the loan has demonstrated signs of weakness as indicated by the ratings below.

- 5. <u>Special Mention</u>: All loans sixty days past due are classified Special Mention. The loan is not upgraded until it has been current for six consecutive months.
- 6. <u>Substandard</u>: All loans 90 days past due are classified Substandard. The loan is not upgraded until it has been current for six consecutive months.
- 7. <u>Doubtful</u>: The relationship has all the weaknesses inherent in a credit graded 5 with the added characteristic that the weaknesses make collection on the basis of currently existing facts, conditions and value, highly questionable or improbable. The possibility of some loss is extremely high.

The risk ratings for classified loans are evaluated at least quarterly for commercial loans or when credit deficiencies arise, such as delinquent loan payments, for commercial, residential mortgage or consumer loans. See further discussion of risk ratings in Note 1.

The following table presents the segments and classes of the loan portfolio summarized by the aggregate pass rating and the criticized and classified ratings of special mention, substandard and doubtful within the Company's internal risk rating system:

		As of December 31, 2019				
(In thousands)	Pass	Special Mention	Substandard	Doubtful	Total	
Residential mortgage loans:						
1-4 family first-lien residential mortgages	\$205,554	\$ 1,093	\$ 1,731	\$1,181	\$209,559	
Construction	3,963	_	_	_	3,963	
Loans held-for-sale	35,790	_	_	_	35,790	
Total residential mortgage loans	245,307	1,093	1,731	1,181	249,312	
Commercial loans:		<u> </u>				
Real estate	238,288	12,473	3,194	302	254,257	
Lines of credit	50,396	7,945	276	_	58,617	
Other commercial and industrial	72,653	8,473	923	43	82,092	
Tax exempt loans	8,067	_	_	_	8,067	
Total commercial loans	369,404	28,891	4,393	345	403,033	
Consumer loans:						
Home equity and junior liens	45,414	191	477	307	46,389	
Other consumer	82,252	167	188	_	82,607	
Total consumer loans	127,666	358	665	307	128,996	
Total loans	\$742,377	\$30,342	\$ 6,789	\$1,833	\$781,341	

		As of December 31, 2018						
(In thousands)	Pass	Special Mention	Substandard	Doubtful	Total			
Residential mortgage loans:			·					
1-4 family first-lien residential mortgages	\$228,563	\$ 999	\$ 1,190	\$1,771	\$232,523			
Construction	7,121				7,121			
Total residential mortgage loans	235,684	999	1,190	1,771	239,644			
Commercial loans:								
Real estate	201,997	8,299	1,947	71	212,314			
Lines of credit	42,489	1,491	233	22	44,235			
Other commercial and industrial	59,344	3,268	612	135	63,359			
Tax exempt loans	9,320				9,320			
Total commercial loans	313,150	13,058	2,792	228	329,228			
Consumer loans:								
Home equity and junior liens	25,706	144	173	86	26,109			
Other consumer	25,294	95	35		25,424			
Total consumer loans	51,000	239	208	86	51,533			
Total loans	\$599,834	\$14,296	\$ 4,190	\$2,085	\$620,405			

Nonaccrual and Past Due Loans

Loans are placed on nonaccrual when the contractual payment of principal and interest has become 90 days past due or management has serious doubts about further collectability of principal or interest, even though the loan may be performing.

Loans are considered past due if the required principal and interest payments have not been received within thirty days of the payment due date.

An age analysis of past due loans, not including net deferred loan costs, segregated by portfolio segment and class of loans, for the years ended December 31, are detailed in the following tables:

	-			As of Decem	ber 31, 2019		
	30-59 Days Past Due		89 Days ast Due	90 Days and	Total		Total Loans
(In thousands)	and Accruing		Accruing	Over	Past Due	Current	Receivable
Residential mortgage loans:							
1-4 family first-lien residential mortgages	\$ 947	\$	744	\$1,613	\$ 3,304	\$ 206,255	\$ 209,559
Construction	_		_	_	_	3,963	3,963
Loans held-for-sale						35,790	35,790
Total residential mortgage loans	947		744	1,613	3,304	246,008	249,312
Commercial loans:							
Real estate	953		100	2,271	3,324	250,933	254,257
Lines of credit	4,464		25	68	4,557	54,060	58,617
Other commercial and industrial	2,747		315	591	3,653	78,439	82,092
Tax exempt loans						8,067	8,067
Total commercial loans	8,164		440	2,930	11,534	391,499	403,033
Consumer loans:							
Home equity and junior liens	315		130	480	925	45,464	46,389
Other consumer	335		50	151	536	82,071	82,607
Total consumer loans	650		180	631	1,461	127,535	128,996
Total loans	\$ 9,761	\$	1,364	\$5,174	\$ 16,299	\$ 765,042	\$ 781,341
				As of Decem	ber 31, 2018		
	30-59 Days		89 Days	90 Days	-		Total Leans
(In thousands)	Past Due	Pa	ast Due		ber 31, 2018 Total Past Due	Current	Total Loans Receivable
Residential mortgage loans:		Pa		90 Days and	Total Past Due	Current	
	Past Due	Pa	ast Due	90 Days and	Total	<u>Current</u> \$ 229,335	
Residential mortgage loans:	Past Due and Accruing	Pa and	ast Due Accruing	90 Days and Over	Total Past Due		Receivable
Residential mortgage loans: 1-4 family first-lien residential mortgages	Past Due and Accruing	Pa and	ast Due Accruing	90 Days and Over	Total Past Due	\$ 229,335	Receivable \$ 232,523
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction	Past Due and Accruing \$ 1,507	Pa and	ast Due Accruing 505	90 Days and Over \$1,176	Total Past Due \$ 3,188	\$ 229,335 7,121	Receivable \$ 232,523 7,121
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Total residential mortgage loans	Past Due and Accruing \$ 1,507	Pa and	ast Due Accruing 505	90 Days and Over \$1,176	Total Past Due \$ 3,188	\$ 229,335 7,121	Receivable \$ 232,523 7,121
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Total residential mortgage loans Commercial loans:	Past Due and Accruing \$ 1,507	Pa and	505 505	90 Days and Over \$1,176 — 1,176	Total Past Due \$ 3,188 3,188	\$ 229,335 7,121 236,456	\$ 232,523 7,121 239,644
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Total residential mortgage loans Commercial loans: Real estate	Past Due and Accruing \$ 1,507 1,507	Pa and	505 — 505 — 364	90 Days and Over \$1,176 ————————————————————————————————————	Total Past Due \$ 3,188 3,188	\$ 229,335 7,121 236,456 207,366	\$ 232,523 7,121 239,644 212,314
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Total residential mortgage loans Commercial loans: Real estate Lines of credit	Past Due and Accruing \$ 1,507	Pa and	505 — 505 — 364 111	90 Days and Over \$1,176	Total Past Due \$ 3,188 3,188 4,948 1,166	\$ 229,335 7,121 236,456 207,366 43,069	\$ 232,523 7,121 239,644 212,314 44,235
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial	Past Due and Accruing \$ 1,507	Pa and	505 — 505 — 364 111	90 Days and Over \$1,176 1,176 323 22 387	Total Past Due \$ 3,188 3,188 4,948 1,166 1,245	\$ 229,335 7,121 236,456 207,366 43,069 62,114	\$ 232,523 7,121 239,644 212,314 44,235 63,359
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial Tax exempt loans	Past Due and Accruing \$ 1,507	Pa and	505 	90 Days and Over \$1,176 1,176 323 22 387	Total Past Due \$ 3,188 3,188 4,948 1,166 1,245	\$ 229,335 7,121 236,456 207,366 43,069 62,114 9,320	\$ 232,523 7,121 239,644 212,314 44,235 63,359 9,320
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial Tax exempt loans Total commercial loans	Past Due and Accruing \$ 1,507	Pa and	505 	90 Days and Over \$1,176 1,176 323 22 387	Total Past Due \$ 3,188 3,188 4,948 1,166 1,245	\$ 229,335 7,121 236,456 207,366 43,069 62,114 9,320	\$ 232,523 7,121 239,644 212,314 44,235 63,359 9,320
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial Tax exempt loans Total commercial loans Consumer loans:	Past Due and Accruing \$ 1,507 1,507 4,261 1,033 814 6,108	Pa and	505 	90 Days and Over \$1,176	Total Past Due \$ 3,188 3,188 4,948 1,166 1,245 7,359	\$ 229,335 7,121 236,456 207,366 43,069 62,114 9,320 321,869	\$ 232,523
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial Tax exempt loans Total commercial loans Consumer loans: Home equity and junior liens	Past Due and Accruing \$ 1,507	Pa and	505 505 505 364 111 44 519	90 Days and Over \$1,176	Total Past Due \$ 3,188 3,188 4,948 1,166 1,245 7,359	\$ 229,335 7,121 236,456 207,366 43,069 62,114 9,320 321,869	\$ 232,523
Residential mortgage loans: 1-4 family first-lien residential mortgages Construction Total residential mortgage loans Commercial loans: Real estate Lines of credit Other commercial and industrial Tax exempt loans Total commercial loans Consumer loans: Home equity and junior liens Other consumer	Past Due and Accruing \$ 1,507 1,507 4,261 1,033 814 6,108	\$	505 	90 Days and Over \$1,176	Total Past Due \$ 3,188 3,188 4,948 1,166 1,245 7,359 288 398	\$ 229,335 7,121 236,456 207,366 43,069 62,114 9,320 321,869 25,821 25,026	\$ 232,523 7,121 239,644 212,314 44,235 63,359 9,320 329,228 26,109 25,424

Year-end nonaccrual loans, segregated by class of loan, were as follows:

(In thousands)	December 31, 2019	December 31, 2018
Residential mortgage loans:		
1-4 family first-lien residential mortgages	\$ 1,613	\$ 1,176
Total residential mortgage loans	1,613	1,176
Commercial loans:	·	
Real estate	2,343	415
Lines of credit	68	28
Other commercial and industrial	591	387
Total commercial loans	3,002	830
Consumer loans:		
Home equity and junior liens	480	35
Other consumer	151	107
Total consumer loans	631	142
Total nonaccrual loans	\$ 5,246	\$ 2,148

There were no loans past due ninety days or more and still accruing interest at December 31, 2019 or 2018.

The Company is required to disclose certain activities related to Troubled Debt Restructurings ("TDR") in accordance with accounting guidance. Certain loans have been modified in a TDR where economic concessions have been granted to a borrower who is experiencing, or expected to experience, financial difficulties. These economic concessions could include a reduction in the loan interest rate, extension of payment terms, reduction of principal amortization, or other actions that it would not otherwise consider for a new loan with similar risk characteristics.

The Company is required to disclose new TDRs for each reporting period for which an income statement is being presented. Pre-modification outstanding recorded investment is the principal loan balance less the provision for loan losses before the loan was modified as a TDR. Post-modification outstanding recorded investment is the principal balance less the provision for loan losses after the loan was modified as a TDR. Additional provision for loan losses is the change in the allowance for loan losses between the pre-modification outstanding recorded investment and post-modification outstanding recorded investment.

The table below details loans that had been modified as TDRs for the year ended December 31, 2019.

		For the year ended December 31, 2019						
		Pre-modification Post-modification		Additional				
		outstanding	outstanding	provision				
	Number of	recorded	recorded	for loan				
(In thousands)	loans	investment	investment	losses				
Residential real estate loans	1	\$ 205	\$ 250	\$ —				

The TDR evaluated for impairment for the twelve months ended December 31, 2019 has been classified as a TDR due to economic concessions granted, which consisted of additional funds advanced without associated increases in collateral and an extended maturity date that will result in a delay in payment from the original contractual maturity.

The table below details loans that have been modified as TDRs for the year ended December 31, 2018.

	For the year ended December 31, 2018							
	Pre-modification Post-modification						litional	
		outs	tanding		tanding	r	vision	
	Number of	rec	corded	rec	orded	fo	r loan	
(In thousands)	<u>loans</u>	inve	investment investment			lc	osses	
Other commercial and industrial loans	1	\$	300	\$	300	\$	_	
Commercial real estate loans	1	\$	123	\$	137	\$	14	

The TDRs individually evaluated for impairment have been classified as TDRs due to economic concessions granted, which consisted of additional funds advanced without associated increases in collateral and/or an extended maturity date that will result in a delay in payment from the original contractual maturity. The Company was required to increase the specific reserves against the commercial real estate loan individually reviewed for impairment by \$14,000, which was a component of the provision of loan losses in the fourth quarter of 2018.

The Company is required to disclose loans that have been modified as TDRs within the previous 12 months in which there was payment default after the restructuring. The Company defines payment default as any loans 90 days past due on contractual payments.

The Company had no loans that had been modified as TDRs during the twelve months prior to December 31, 2019, which had subsequently defaulted during the year ended December 31, 2019.

The Company had no loans that had been modified as TDRs during the twelve months prior to December 31, 2018, which had subsequently defaulted during the year ended December 31, 2018.

When the Company modifies a loan within a portfolio segment that is individually evaluated for impairment, a potential impairment is analyzed either based on the present value of the expected future cash flows discounted at the interest rate of the original loan terms or the fair value of the collateral less costs to sell. If it is determined that the value of the loan is less than its recorded investment, then impairment is recognized as a component of the provision for loan losses, an associated increase to the allowance for loan losses or as a charge-off to the allowance for loan losses in the current period.

Impaired Loans

The following table summarizes impaired loans information by portfolio class:

	D	ecember 31, 20	19	December 31, 2018			
(In thousands)	Recorded Investment	Unpaid Principal Balance	Related Allowance	Recorded Investment	Unpaid Principal Balance	Related Allowance	
With no related allowance recorded:							
1-4 family first-lien residential mortgages	\$ 1,027	\$1,027	\$ —	\$ 1,221	\$1,226	\$ —	
Commercial real estate	3,996	4,067	_	2,387	2,448	_	
Commercial lines of credit	86	86	_	228	228	_	
Other commercial and industrial	69	77	_	451	452	_	
Home equity and junior liens	40	40	_	_	_	_	
Other consumer	55	55	_	_	_	_	
With an allowance recorded:							
1-4 family first-lien residential mortgages	584	584	97	606	606	108	
Commercial real estate	450	450	78	486	486	100	
Commercial lines of credit	98	98	98	28	28	28	
Other commercial and industrial	866	866	406	373	373	255	
Home equity and junior liens	180	180	150	207	207	140	
Other consumer	36	36	1	_	_	_	
Total:							
1-4 family first-lien residential mortgages	1,611	1,611	97	1,827	1,832	108	
Commercial real estate	4,446	4,517	78	2,873	2,934	100	
Commercial lines of credit	184	184	98	256	256	28	
Other commercial and industrial	935	943	406	824	825	255	
Home equity and junior liens	220	220	150	207	207	140	
Other consumer	91	91	1				
Totals	\$ 7,487	\$ 7,566	\$ 830	\$ 5,987	\$6,054	\$ 631	

The following table presents the average recorded investment in impaired loans for years ended December 31:

2018
\$1,842
4,555
343
965
224
_
\$7,929

The following table presents the cash basis interest income recognized on impaired loans for the years ended December 31:

(In thousands)	2019	2018
1-4 family first-lien residential mortgages	\$ 62	\$ 61
Commercial real estate	190	175
Commercial lines of credit	16	28
Other commercial and industrial	66	38
Home equity and junior liens	11	12
Other consumer	7	_
Total	\$352	\$314

NOTE 6: ALLOWANCE FOR LOAN LOSSES

Changes in the allowance for loan losses for the years ended December 31, 2019 and 2018 and information pertaining to the allocation of the allowance for loan losses and balances of the allowance for loan losses and loans receivable based on individual and collective impairment evaluation by loan portfolio class at the indicated dates are summarized in the tables below. An allocation of a portion of the allowance to a given portfolio class does not limit the Company's ability to absorb losses in another portfolio class.

	December 31, 2019						
(In thousands) Allowance for loan losses:	1-4 family first-lien residential mortgage	Construction	Commercial real estate	Commercial lines of credit	Other commercial and industrial		
Beginning Balance	\$ 766	\$ —	\$ 3,578	\$ 730	\$ 1,285		
Charge-offs	(11)	Ψ —	ψ 5,570 —	(136)	(158)		
Recoveries	2	_	_	—	1		
Provisions (credits)	(177)	_	432	601	517		
Ending balance	\$ 580	\$ —	\$ 4,010	\$ 1,195	\$ 1,645		
Ending balance: related to loans individually evaluated for							
impairment	\$ 97	\$ —	\$ 78	\$ 98	\$ 406		
Ending balance: related to loans collectively evaluated for							
impairment	\$ 483	\$ —	\$ 3,932	\$ 1,097	\$ 1,239		
Loans receivables:							
Ending balance	\$209,559	\$ 3,963	\$ 254,257	\$ 58,617	\$ 82,092		
Ending balance: individually evaluated for impairment	\$ 1,611	\$ —	\$ 4,446	\$ 184	\$ 935		
Ending balance: collectively evaluated for impairment	\$207,948	\$ 3,963	\$ 249,811	\$ 58,433	\$ 81,157		

	Tax exempt	Home equity and junior liens	Other consumer	Unallocated (1)	Total
Allowance for loan losses:			<u> </u>		
Beginning Balance	\$ 1	\$ 409	\$ 385	\$ 152	\$ 7,306
Charge-offs	_	(7)	(354)	_	(666)
Recoveries	_	_	60	_	63
Provisions	_	151	322	120	1,966
Ending balance	\$ 1	\$ 553	\$ 413	\$ 272	\$ 8,669
Ending balance: related to loans individually evaluated for					
impairment	<u>\$</u>	\$ 150	\$ 1	<u> </u>	\$ 830
Ending balance: related to loans collectively evaluated for		·			·
impairment	<u>\$ 1</u>	\$ 403	\$ 412	\$ 272	\$ 7,839
Loans receivables:					
Ending balance	\$ 8,067	\$ 46,389	\$82,607	\$ 35,790	\$781,341
Ending balance: individually evaluated for impairment	\$ —	\$ 220	\$ 91	\$ —	\$ 7,487
Ending balance: collectively evaluated for impairment	\$ 8,067	\$ 46,169	\$82,516	\$ 35,790	\$773,854

(1) The ending balance of the loans receivable for the unallocated portion of the allowance includes loans held-for-sale. At December 31, 2019, the Bank had loans held-for-sale with a principal balance of \$35.8 million. These loans were still part of the portfolio as of December 31, 2019. Based on ASC 948, Mortgage Banking, loans shall be classified as held-for-sale once a decision has been made to sell the loans and shall be transferred to the held-for-sale category at lower of cost or fair value.

	December 31, 2018									
(In thousands)	first resid	family t-lien lential tgage	Con	struction		mmercial al estate	_	ommercial es of credit		Other mmercial l industrial
Allowance for loan losses:						,		,		
Beginning Balance	\$	865	\$	_	\$	3,589	\$	735	\$	1,214
Charge-offs		(245)		_		(643)		(102)		(207)
Recoveries		21		_		_		66		_
Provisions		125		_		632		31		278
Ending balance	\$	766	\$		\$	3,578	\$	730	\$	1,285
Ending balance: related to loans individually evaluated for										
impairment	\$	108	\$	_	\$	100	\$	28	\$	255
Ending balance: related to loans collectively evaluated for						,				
impairment	\$	658	\$	_	\$	3,478	\$	702	\$	1,030
Loans receivables:										
Ending balance	\$232	2,523	\$	7,121	\$ 2	212,314	\$	44,235	\$	63,359
Ending balance: individually evaluated for impairment	\$	1,827	\$	_	\$	2,873	\$	256	\$	824
Ending balance: collectively evaluated for impairment	\$230	0,696	\$	7,121	\$ 2	209,441	\$	43,979	\$	62,535

	Tax e	xempt	me equity junior liens		Other nsumer	Unal	located		Total
Allowance for loan losses:									
Beginning Balance	\$	1	\$ 514	\$	208	\$	_	\$	7,126
Charge-offs		_	(17)		(248)		_		(1,462)
Recoveries		_	7		51		_		145
Provisions (credits)		_	(95)		374		152		1,497
Ending balance	\$	1	\$ 409	\$	385	\$	152	\$	7,306
Ending balance: related to loans individually evaluated for impairment	\$	_	\$ 140	\$		\$		\$	631
Ending balance: related to loans collectively evaluated for impairment	\$	1	\$ 269	\$	385	\$	152	\$	6,675
Loans receivables:			 						
Ending balance	\$ 9	9,320	\$ 26,109	\$2	5,424			\$6	520,405
Ending balance: individually evaluated for impairment	\$	_	\$ 207	\$	_			\$	5,987
Ending balance: collectively evaluated for impairment	\$ 9	,320	\$ 25,902	\$2	5,424			\$0	514,418

The Company's methodology for determining its allowance for loan losses includes an analysis of qualitative factors that are added to the historical loss rates in arriving at the total allowance for loan losses needed for this general pool of loans. The qualitative factors include:

- Changes in national and local economic trends;
- The rate of growth in the portfolio;
- Trends of delinquencies and nonaccrual balances;
- · Changes in loan policy; and
- Changes in lending management experience and related staffing.

Each factor is assigned a value to reflect improving, stable or declining conditions based on management's best judgment using relevant information available at the time of the evaluation. These qualitative factors, applied to each product class, make the evaluation inherently subjective, as it requires material estimates that may be susceptible to significant revision as more information becomes available. Adjustments to the factors are supported through documentation of changes in conditions in a narrative accompanying the allowance for loan losses analysis and calculation.

The allocation of the allowance for loan losses summarized on the basis of the Company's calculation methodology was as follows:

			December 31, 2019)	
(In thousands)	1-4 family first-lien residential mortgage	Construction	Commercial real estate	Commercial lines of credit	Other commercial and industrial
Specifically reserved	\$ 97	\$ —	\$ 78	\$ 98	\$ 406
Historical loss rate	43	_	98	106	34
Qualitative factors	440	_	3,834	991	1,205
Total	\$ 580	<u>\$</u>	\$ 4,010	\$ 1,195	\$ 1,645
	Tax exempt	Home equity and junior liens	Other consumer	Unallocated	Total
Specifically reserved	\$ —	\$ 150	\$ 1	\$ —	\$ 830
Historical loss rate		85	167	_	533
Qualitative factors	1	318	245		7,034
Other				272	272
Total	\$ 1	\$ 553	\$ 413	\$ 272	\$8,669
	4.46	I	December 31, 2018		
	1-4 family first-lien residential		Commercial	Commercial	Other commercial
(In thousands)	first-lien residential mortgage	Construction	Commercial real estate	lines of credit	commercial and industrial
Specifically reserved	first-lien residential mortgage \$ 108		Commercial real estate \$ 100	\$ 28	commercial and industrial \$ 255
Specifically reserved Historical loss rate	first-lien residential mortgage \$ 108	Construction	Commercial real estate \$ 100	lines of credit \$ 28 20	commercial and industrial \$ 255
Specifically reserved Historical loss rate Qualitative factors	first-lien residential mortgage \$ 108 87 571	Construction S — — —	Commercial real estate \$ 100 85 3,393	\$ 28 20 682	commercial and industrial \$ 255 24 1,006
Specifically reserved Historical loss rate	first-lien residential mortgage \$ 108	Construction	Commercial real estate \$ 100	lines of credit \$ 28 20	commercial and industrial \$ 255 24
Specifically reserved Historical loss rate Qualitative factors	first-lien residential mortgage \$ 108 87 571 \$ 766	Construction \$ — — — \$ — Home equity	Commercial real estate \$ 100 85 3,393 \$ 3,578	\$ 28 20 682 \$ 730	commercial and industrial \$ 255 24 1,006 \$ 1,285
Specifically reserved Historical loss rate Qualitative factors Total	first-lien residential mortgage \$ 108 87 571 \$ 766	Construction \$ Home equity and junior liens	Commercial real estate \$ 100 85 3,393 \$ 3,578 Other consumer	1 28 20 682 \$ 730	commercial and industrial \$ 255 24 1,006 \$ 1,285
Specifically reserved Historical loss rate Qualitative factors	first-lien residential mortgage \$ 108 87 571 \$ 766	Construction \$ — — — \$ — Home equity and junior liens	Commercial real estate \$ 100 85 3,393 \$ 3,578	\$ 28 20 682 \$ 730	commercial and industrial \$ 255
Specifically reserved Historical loss rate Qualitative factors Total Specifically reserved	first-lien residential mortgage \$ 108 87 571 \$ 766	Construction \$ — — — \$ — Home equity and junior liens \$ 140	Commercial real estate \$ 100 85 3,393 \$ 3,578 Other consumer \$ —	1 28 20 682 \$ 730	commercial and industrial \$ 255
Specifically reserved Historical loss rate Qualitative factors Total Specifically reserved Historical loss rate	first-lien residential mortgage \$ 108 87 571 \$ 766 Tax exempt \$ —	Construction \$ — — — \$ — Home equity and junior liens \$ 140 15	Commercial real estate \$ 100 85 3,393 \$ 3,578 Other consumer \$ 155	Section Control Cont	commercial and industrial \$ 255
Specifically reserved Historical loss rate Qualitative factors Total Specifically reserved Historical loss rate Qualitative factors	first-lien residential mortgage \$ 108 87 571 \$ 766 Tax exempt \$ —	Construction \$ — — — \$ — Home equity and junior liens \$ 140 15	Commercial real estate \$ 100 85 3,393 \$ 3,578 Other consumer \$ 155	Section Control Cont	commercial and industrial \$ 255

NOTE 7: SERVICING

Loans serviced for others are not included in the accompanying consolidated statements of condition. At December 31, 2019 and 2018, the Bank serviced 195 and 206 residential mortgage loans for others, respectively. The unpaid principal balances of mortgage loans serviced for others were \$11.8 million and \$11.9 million at December 31, 2019 and 2018, respectively. The balance of capitalized servicing rights included in other assets at December 31, 2019 and 2018, was \$19,000 and \$16,000, respectively.

The following summarizes mortgage servicing rights capitalized and amortized:

(In thousands)	2019	2018
Mortgage servicing rights capitalized	\$16	\$ —
Mortgage servicing rights amortized	\$13	\$ 12

NOTE 8: PREMISES AND EQUIPMENT

A summary of premises and equipment at December 31, is as follows:

(In thousands)	2019	2018
Land	\$ 2,268	\$ 2,205
Buildings	17,673	16,094
Furniture, fixtures and equipment	15,936	15,029
Construction in progress	4,575	3,599
	40,452	36,927
Less: Accumulated depreciation	17,753	16,304
	\$22,699	\$ 20,623
Construction in progress	4,575 40,452 17,753	3,59 36,92 16,30

Depreciation expense in 2019 and 2018 was \$1.5 million and \$1.2 million, respectively.

NOTE 9: FORECLOSED REAL ESTATE

The Company is required to disclose the carrying amount of foreclosed residential real estate properties held at each reporting period as a result of obtaining physical possession of the property.

	Number of	December 31,	Number of	December 31,
(Dollars in thousands)	properties	2019	properties	2018
Foreclosed residential real estate		\$ —	2	\$ 73

At December 31, 2019 and 2018, the Company reported \$341,000 and \$951,000, respectively, in residential real estate loans in the process of foreclosure.

NOTE 10: GOODWILL AND INTANGIBLE ASSETS

Goodwill represents the excess cost of an acquisition over the fair value of the net assets acquired. Goodwill is not amortized, but is evaluated annually for impairment or between annual evaluations in certain circumstances. Management performs an annual assessment of the Company's goodwill to determine whether or not any impairment of the carrying value may exist.

Of the \$4.5 million of goodwill carried on the Company's books as of December 31, 2019, \$3.8 million of this amount was due to prior periods acquisitions of bank branches and \$696,000 was due to the 2013 acquisition of the FitzGibbons Agency by Pathfinder Risk Management Company, Inc. and the 2015 acquisition of the Huntington Agency.

The Company is permitted to assess qualitative factors to determine if it is more likely than not that the fair value of the reporting unit is less than the carrying value. Based on the results of the assessment, management has determined that the carrying value of goodwill in the amount of \$4.5 million is not impaired as of December 31, 2019.

The identifiable intangible asset of \$149,000 as of December 31, 2019 was due to the acquisition of the FitzGibbons and Huntington Agencies and represents the amortized carrying amount of the customer lists intangible. The weighted average remaining amortization period of this intangible asset is 5.2 years.

The gross carrying amount and annual amortization for this identifiable intangible asset are as follows:

	Decem	ber 31,
(In thousands)	2019	2018
Gross carrying amount	\$243	\$243
Accumulated amortization	(94)	(78)
Net amortizing intangibles	\$149	\$165

The estimated amortization expense for each of the five succeeding years ended December 31, is as follows:

\$ 16
16
16
16
16
69
\$149

NOTE 11: DEPOSITS

A summary of deposits at December 31 is as follows:

(In thousands)	2019	2018
Savings accounts	\$ 81,926	\$ 80,545
Time accounts	301,193	199,598
Time accounts of \$250,000 or more	120,450	77,224
Money management accounts	14,388	13,180
MMDA accounts	185,402	189,679
Demand deposit interest-bearing	64,533	57,407
Demand deposit noninterest-bearing	107,501	103,124
Mortgage escrow funds	6,500	6,303
Total Deposits	\$881,893	\$727,060

At December 31, 2019, the scheduled maturities of time deposits are as follows:

(In thousands)	
Year of Maturity:	
2020	\$ 386,920
2021	24,456
2022	4,639
2023	2,360
2024	1,499
Thereafter	1,769
Total	\$421,643

In addition to deposits obtained from its business operations within its target market areas, the Bank also obtains brokered deposits through various programs administered by Promontory Interfinancial Network and through other unaffiliated third-party financial institutions.

	At December 31,					
		2019			2018	
(In thousands)	Non-Brokered	Brokered	Total	Non-Brokered	Brokered	Total
Savings accounts	\$ 81,926	\$ —	\$ 81,926	\$ 80,545	\$ —	\$ 80,545
Time accounts	190,685	110,508	301,193	158,207	41,391	199,598
Time accounts of \$250,000 or more	94,455	25,995	120,450	77,224	_	77,224
Money management accounts	14,388	_	14,388	13,180		13,180
MMDA accounts	185,356	46	185,402	189,625	54	189,679
Demand deposit interest-bearing	64,533	_	64,533	57,407	_	57,407
Demand deposit noninterest-bearing	107,501	_	107,501	103,124	_	103,124
Mortgage escrow funds	6,500		6,500	6,303		6,303
Total Deposits	\$ 745,344	\$ 136,549	\$ 881,893	\$ 685,615	\$ 41,445	\$ 727,060

NOTE 12: BORROWED FUNDS

The composition of borrowings (excluding subordinated loans) at December 31 is as follows:

(In thousands)	2019	2018
Short-term:		
FHLB Advances	\$25,138	\$ 39,000
Total short-term borrowings	\$25,138	\$ 39,000
Long-term:		
FHLB advances	\$67,987	\$ 79,534
Total long-term borrowings	\$67,987	\$ 79,534

The principal balances, interest rates and maturities of the outstanding long-term borrowings, all of which are at a fixed rate, at December 31, 2019 are as follows:

<u>Term</u>	Principal	Rates
(Dollars in thousands)	 -	
Advances with FHLB		
Due within 1 year	\$ 30,193	1.62 - 3.03%
Due within 2 years	25,969	1.74 - 3.10%
Due within 10 years	11,825	1.68 - 3.17%
Total advances with FHLB	\$ 67,987	
Total long-term fixed rate borrowings	\$ 67,987	

At December 31, 2019, scheduled repayments of long-term debt are as follows:

\$ 30,193
25,969
11,000
825
_
<u> </u>
\$ 67,987

The Company has access to FHLBNY advances, under which it can borrow at various terms and interest rates. Residential mortgage loans with a carrying value of \$136.9 million and FHLB stock with a carrying value of \$4.8 million have been pledged by the Company under a blanket collateral agreement to secure the Company's borrowings at December 31, 2019. The total outstanding indebtedness under borrowing facilities with the FHLB cannot exceed the total value of the assets pledged under the blanket collateral agreement. The Company has a \$21.3 million line of credit available at December 31, 2019 with the Federal Reserve Bank of New York through its Discount Window and has pledged various corporate and municipal securities against the line. The Company has \$15.0 million in lines of credit available with two other correspondent banks. \$10.0 million of that line of credit is available on an unsecured basis and the remaining \$5.0 million must be collateralized with investment securities. Interest on the lines is determined at the time of borrowing.

NOTE 13: SUBORDINATED LOANS

The Company has a non-consolidated subsidiary trust, Pathfinder Statutory Trust II, of which the Company owns 100% of the common equity. The Trust issued \$5,000,000 of 30-year floating rate Company-obligated pooled capital securities of Pathfinder Statutory Trust II ("Floating-Rate Debentures"). The Company borrowed the proceeds of the capital securities from its subsidiary by issuing floating rate junior subordinated deferrable interest debentures having substantially similar terms. The capital securities mature in 2037 and are treated as Tier 1 capital by the FDIC and FRB. The capital securities of the trust are a pooled trust preferred fund of Preferred Term Securities VI, Ltd., whose interest rate resets quarterly, and are indexed to the 3-month LIBOR rate plus 1.65%. These securities have a five-year call provision. The Company paid \$213,000 and \$199,000 in interest expense related to this issuance in 2019 and 2018, respectively. The Company guarantees all of these securities.

The Company's equity interest in the trust subsidiary is included in other assets on the Consolidated Statements of Financial Condition at December 31, 2019 and 2018. For regulatory reporting purposes, the Federal Reserve has indicated that the preferred securities will continue to qualify as Tier 1 Capital subject to previously specified limitations, until further notice. If regulators make a determination that Trust Preferred Securities can no longer be considered in regulatory capital, the securities become callable and the Company may redeem them.

On October 15, 2015, the Company executed a \$10.0 million non-amortizing Subordinated Loan with an unrelated third party that is scheduled to mature on October 1, 2025. The Company has the right to prepay the Subordinated Loan at any time after October 15, 2020 without penalty. The annual interest rate charged to the Company will be 6.25% through the maturity date of the subordinated loan. The Subordinated Loan is senior in the Company's credit repayment hierarchy only to the Company's common equity and, as a result, qualifies as Tier 2 capital for all future periods when applicable. The Company paid \$172,000 in origination and legal fees as part of this transaction. These fees will be amortized over the life of the Subordinated Loan through its first call date using the effective interest method. The effective cost of funds related to this transaction is 6.44% calculated under this method. Accordingly, interest expense of \$650,000 and \$647,000 were recorded in the years ended December 31, 2019 and 2018, respectively.

The composition of subordinated loans at December 31 is as follows:

(In thousands)	2019	2018
Subordinated loans:		
Junior subordinated debenture	\$ 5,155	\$ 5,155
Subordinated loan	9,973	9,939
Total subordinated loans	\$15,128	\$ 15,094

The principal balances, interest rates and maturities of the subordinated loans at December 31, 2019 are as follows:

Term	Principal	Rates
(Dollars in thousands)		
Subordinated loans:		
Due within 10 years	\$ 9,973	6.48%
Due within 18 years	5,155	3-Month Libor + 1.65%
Total subordinated loans	\$ 15,128	

At December 31, 2019, scheduled repayments of the subordinated loans:

(In thousands)	
2020	\$ —
2021	_
2022	_
2023	_
2024	_
Thereafter	15,128
Total	\$ 15,128

NOTE 14: EMPLOYEE BENEFITS AND DEFERRED COMPENSATION AND SUPPLEMENTAL RETIREMENT PLANS

The Company has a noncontributory defined benefit pension plan covering substantially all employees. The plan provides defined benefits based on years of service and final average salary. On May 14, 2012, the Company informed its employees of its decision to freeze participation and benefit accruals under the plan, primarily to reduce some of the volatility in earnings that can accompany the maintenance of a defined benefit plan. The plan was frozen on June 30, 2012. Compensation earned by employees up to June 30, 2012 is used for purposes of calculating benefits under the plan but there will be no future benefit accruals after this date. Participants as of June 30, 2012 will continue to earn vesting credit with respect to their frozen accrued benefits as they continue to work. In addition, the Company provides certain health and life insurance benefits for a limited number of eligible retired employees. The healthcare plan is contributory with participants' contributions adjusted annually; the life insurance plan is noncontributory. Employees with less than 14 years of service as of January 1, 1995, are not eligible for the health and life insurance retirement benefits.

The following tables set forth the changes in the plans' benefit obligations, fair value of plan assets and the plans' funded status as of December 31:

	Pension Benefits		nefits Postretirement E	
(In thousands)	2019	2018	2019	2018
Change in benefit obligations:				
Benefit obligations at beginning of year	\$10,095	\$10,469	\$ 454	\$ 481
Service cost	_	_	_	_
Interest cost	494	473	22	21
Plan participants' contribution	_	_	8	9
Actuarial loss (gain)	1,558	(581)	(27)	(16)
Benefits paid	(255)	(266)	(43)	(41)
Benefit obligations at end of year	11,892	10,095	414	454
Change in plan assets:				
Fair value of plan assets at beginning of year	14,522	14,956		
Actual return on plan assets	2,718	(993)	_	_
Benefits paid	(255)	(266)	(43)	(41)
Plan participants' contribution	_	_	8	9
Employer contributions		825	35	32
Fair value of plan assets at end of year	16,985	14,522		
Funded (unfunded) status – asset (liability)	\$ 5,093	\$ 4,427	\$ (414)	\$ (454)

The funded status of the pension was recorded within other assets on the statement of condition. The unfunded status of the postretirement plan is recorded within other liabilities on the statement of condition.

Amounts recognized in accumulated other comprehensive loss as of December 31 are as follows:

	Pensio	Pension Benefits		Postretireme		iefits
(In thousands)	2019	2018	2	019		2018
Net loss	\$3,557	\$4,112	\$	117	\$	151
Tax Effect	929	1,074		31		40
	\$2,628	\$3,038	\$	86	\$	111

Gains and losses in excess of 10% of the greater of the benefit obligation or the fair value of assets are amortized over the average remaining service period of active participants.

The Company utilized the actual projected cash flows of the participants in both plans for the years ended December 31, 2019 and December 31, 2018. The following points address the approach taken.

- 1. An analysis of the defined benefit pension plan's expected future cash flows and high-quality fixed income investments currently available and expected to be available during the period to maturity of the pension benefits yielded a single discount rate of 3.97% at December 31, 2019.
- 2. An analysis of the postretirement health plan's expected future cash flows and high-quality fixed-income investments currently available and expected to be available during the period to maturity of the retiree medical benefits yielded a single discount rate of 3.97% at December 31, 2019.
- 3. Each discount rate was developed by matching the expected future cash flows of the Bank to high quality bonds. Every bond considered has earned ratings of at least AA by Fitch Group, AA by Standard & Poor's, or Aa2 by Moody's Investor Services.

The accumulated benefit obligation for the defined benefit pension plan was \$11.9 million and \$10.1 million at December 31, 2019 and 2018, respectively. The postretirement plan had an accumulated benefit obligation of \$414,000 and \$454,000 at December 31, 2019 and 2018, respectively.

The significant assumptions used in determining the benefit obligations as of December 31, are as follows:

	Pension I	Pension Benefits		it Benefits
	2019	2018	2019	2018
Weighted average discount rate	3.97%	4.97%	3.97%	4.97%
Rate of increase in future compensation levels				

Assumed health care cost trend rates have a significant effect on the amounts reported for the postretirement health care plan. The annual rates of increase in the per capita cost of covered medical and prescription drug benefits for future years were assumed to be 4.50% for 2020, gradually decreasing to 4.20% in 2023 and remain at that level thereafter.

The composition of the net periodic benefit plan (benefit) cost for the years ended December 31 is as follows:

	Pensi	on Benefits	Postretireme	ent Benefits
(In thousands)	2019	2018	2019	2018
Service cost	\$ —	\$ —	\$ —	\$ —
Interest cost	494	473	22	21
Expected return on plan assets	(934)	(1,037)	_	_
Amortization of transition obligation	_	_	_	_
Amortization of net losses	328	164	12	13
Amortization of unrecognized past service liability			(5)	(5)
Net periodic benefit plan (benefit) cost	\$(112)	\$ (400)	\$ 29	\$ 29

The significant assumptions used in determining the net periodic benefit plan cost for years ended December 31, were as follows:

	Pension E	Pension Benefits		t Benefits
	2019	2018	2019	2018
Weighted average discount rate	3.97%	4.97%	3.97%	4.97%
Expected long term rate of return on plan assets	6.50%	6.50%		_
Rate of increase in future compensation levels	_	_	_	_

The long term rate of return on assets assumption was set based on historical returns earned by equities and fixed income securities, adjusted to reflect expectations of future returns as applied to the plan's target allocation of asset classes. Equities and fixed income securities were assumed to earn real rates of return in the ranges of 6.0%-8.0% and 3.0%-5.0%, respectively. The long-term inflation rate was estimated to be 2.5%. When these overall return expectations are applied to the plan's target allocation, the expected rate of return was determined to be in the range of 5.0% to 7.0%. Management chose to use a 6.5% expected long-term rate of return in 2019 and a 6.5% expected long-term rate of return in 2020 reflecting current economic conditions and expected rates of return. Based on the \$17.0 million fair value of plan assets at December 31, 2019, each 50 basis point decrease in the expected long-term rate of return would reduce after tax net income at 2020 expected marginal tax rate of 21.0% by approximately \$67,000.

The estimated net actuarial loss that will be amortized from accumulated other comprehensive loss into net periodic benefit plan income during 2020 is \$228,000. The estimated amortization of the unrecognized transition obligation and actuarial loss for the postretirement health plan in 2020 is \$10,000. The expected net periodic benefit plan benefit for 2020 is estimated to be \$379,000 for both retirement plans in aggregate.

Plan assets are invested in three diversified investment portfolios of the Pentegra Retirement Trust (the "Trust", formerly known as RSI Retirement Trust), a private placement investment fund. The Trust has been given discretion by the Plan Sponsor to determine the appropriate strategic asset allocation versus plan liabilities, as governed by the Trust's Investment Policy Statement. The Plan is structured to utilize a Total Return approach which seeks to fund the current and future liabilities of the Plan via long-term growth in assets.

The Plan's asset allocation targets to hold 48% of assets in equity securities via investment in the Long-Term Growth – Equity Portfolio ('LTGE'), 16% in intermediate-term investment grade bonds via investment in the Long-Term Growth – Fixed-Income Portfolio ('LTGFI'), 35% in long duration bonds via the Liability Focused Fixed-Income Portfolio ('LFFI'), and 1% in a cash equivalents portfolio (for liquidity).

LTGE is a diversified portfolio that invests in a number of actively and passively managed equity-focused mutual funds and collective investment trusts. The Portfolio holds a diversified mix of equity funds in order to gain exposure to the U.S. and non-U.S. equity markets. LTGFI is a diversified portfolio that invests in a number of fixed-income mutual funds and collective investment trusts. The Portfolio invests primarily in intermediate-term bond funds with a focus on Core Plus fixed-income investment approaches. LFFI is a diversified high quality fixed-income portfolio that currently invests in passively managed collective investment trusts that hold long duration bonds.

The investment objectives, investment strategies and risk of each of the daily valued and unitized Portfolios and the funds held within the Portfolios are detailed in the Private Placement Memorandum and the Trust's Investment Policy Statement.

The overall long-term investment objectives are to maintain plan assets at a level that will sufficiently cover long-term obligations and to generate a return on plan assets that will meet or exceed the rate at which long-term obligations will grow. The LTGE and LTGFI Portfolios are designed to provide long-term growth of equity and fixed-income assets with the objective of achieving an investment return in excess of the cost of funding the active life, deferred vested, and all 30-year term and longer obligations of retired lives in the Trust. The LFFI Portfolio is designed to fund the Trust's estimated retired lives class of liabilities for 30 years. The ALT Strategy is designed to add diversification via the addition of relatively low correlation assets. Risk/volatility is further managed by the distinct investment objectives of each of the Trust's Portfolios.

Pension plan assets measured at fair value are summarized below:

		At December 31, 2019			
(In thousands)	Level 1	Level 2	Level 3	Total Fair Value	
Asset Category:					
Mutual Funds – Equity					
Large-cap value (a)	\$ —	\$ 1,432	\$ —	\$ 1,432	
Large-cap Growth (b)	_	1,470	_	1,470	
Large-cap Core (c)	_	1,075	_	1,075	
Mid-cap Value (d)	_	307	_	307	
Mid-cap Growth (e)	_	328	_	328	
Mid-cap Core (f)	_	314	_	314	
Small-cap Value (g)	_	220	_	220	
Small-cap Growth (h)	_	466	_	466	
Small-cap Core (i)	_	211	_	211	
International Equity (j)	_	1,733	_	1,733	
Equity – Total		7,556		7,556	
Fixed Income Funds					
Fixed Income – US Core (k)	_	2,356	_	2,356	
Intermediate Duration (1)	_	3,708	_	3,708	
Long Duration (m)	_	3,084	_	3,084	
Fixed Income-Total		9,148		9,148	
Company Common Stock	_	_	_	_	
Cash Equivalents-Money market*	48	233	_	281	
Total	\$ 48	\$16,937	<u>\$ —</u>	\$16,985	

		At December 31, 2018			
(In thousands)	Level 1	Level 2	Level 3	Total Fair Value	
Asset Category:					
Mutual Funds – Equity					
Large-cap value (a)	\$ —	\$ 1,132	\$ —	\$ 1,132	
Large-cap Growth (b)	_	1,157		1,157	
Large-cap Core (c)	_	821	_	821	
Mid-cap Value (d)		242		242	
Mid-cap Growth (e)	_	247	_	247	
Mid-cap Core (f)		250		250	
Small-cap Value (g)	—	193	_	193	
Small-cap Growth (h)		337	_	337	
Small-cap Core (i)	—	189	_	189	
International Equity (i)		1,409		1,409	
Equity – Total	_	5,977	_	5,977	
Fixed Income Funds					
Fixed Income – US Core (k)	_	2,207	_	2,207	
Intermediate Duration (l)		3,255		3,255	
Long Duration (m)	_	2,521	_	2,521	
Fixed Income-Total		7,983		7,983	
Company Common Stock	_	_	_	_	
Cash Equivalents-Money market*	271	291	_	562	
Total	\$ 271	\$14,251	\$ <u></u>	\$14,522	

- * Includes cash equivalents investments in equity and fixed income strategies
- a) This category contains large-cap stocks with above-average yield. The portfolio typically holds between 60 and 70 stocks.
- b) This category seeks long-term capital appreciation by investing primarily in large growth companies based in the U.S.
- c) This fund tracks the performance of the S&P 500 index by purchasing the securities represented in the index in approximately the same weightings as the index.
- d) This category employs an indexing investment approach designed to track the performance of the CRSP US Mid-Cap Value Index.
- e) This category employs an indexing investment approach designed to track the performance of the CRSP US Mid-Cap Growth Index.
- f) This category seeks to track the performance of the S&P Midcap 400 Index.
- g) This category consists of a selection of investments based on the Russell 2000 Value Index.
- h) This category consists of a mutual fund invested in smallcap growth companies along with a fund invested in a selection of investments based on the Russell 2000 Growth Index.
- i) This category consists of a mutual fund investing in readily marketable securities of U.S. companies with market capitalizations within the smallest 10% of the market universe, or smaller than the 1000th largest US company.
- j) This category invests primarily in medium to large non-US companies in developed and emerging markets. Under normal circumstances, at least 80% of total assets will be invested in equity securities, including common stocks, preferred stocks, and convertible securities.
- k) This category currently includes equal investments in three mutual funds, two of which usually hold at least 80% of fund assets in investment grade fixed income securities, seeking to outperform the Barclays US Aggregate Bond Index while maintaining a similar duration to that index. The third fund targets investments of 50% or more in mortgage-backed securities guaranteed by the US government and its agencies.

- l) This category consists mostly of a fund which seeks to track the Barclays Capital US Corporate A or Better 5-20 Year, Bullets only Index, along with a diversified mutual fund holding fixed income securities rated A or better.
- m) This category consists of a fund that seeks to approximate the performance of the Barclays Capital US Corporate A or Better, 20+ Year Bullets Only Index over the long term.

For the fiscal year ending December 31, 2020, the Company expects to contribute approximately \$36,000 to the postretirement plan.

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid from both retirement plans:

(In thousands) Years ending December 31:	Pension Benefits	rirement nefits	Total
2020	\$ 320	\$ 36	\$ 356
2021	333	37	370
2022	374	38	412
2023	451	25	476
2024	470	25	495
Years 2025-2029	3,170	118	3,288

The Company also offers a 401(k) plan to its employees. Contributions to this plan by the Company were \$393,000 and \$371,000 for 2019 and 2018, respectively. In addition, the Company made \$291,000 and \$273,000 of safe harbor contributions to the plan in 2019 and 2018, respectively.

The Company maintains optional deferred compensation plans for its directors and certain executive officers, whereby fees and income normally received are deferred and paid by the Company based upon a payment schedule commencing between the ages of 65 and 70 and continuing monthly for 10 years. At December 31, 2019 and 2018, other liabilities include approximately \$2.8 million and \$2.7 million, respectively, relating to deferred compensation. Deferred compensation expense for the years ended December 31, 2019 and 2018 amounted to approximately \$349,000 and \$258,000, respectively.

To assist in the funding of the Company's benefits under the supplemental executive retirement plan and deferred compensation plans, the Company is the owner of single premium life insurance policies on selected participants. At December 31, 2019 and 2018, the cash surrender values of these policies were \$17.4 million and \$16.9 million, respectively.

The Bank adopted a Defined Contribution Supplemental Executive Retirement Plan (the "SERP"), effective January 1, 2014. The SERP benefits certain key senior executives of the Bank who are selected by the Board to participate, including our Named Executive Officers. The SERP is intended to provide a benefit from the Bank upon retirement, death, disability or voluntary or involuntary termination of service (other than "for cause"), subject to the requirements of Section 409A of the Internal Revenue Code. Accordingly, the SERP obligates the Bank to make a contribution to each executive's account on the last business day of each calendar year. In addition, the Bank, may, but is not required to, make additional discretionary contributions to the executive's accounts from time to time. All executives currently participating in the plan, including the Named Executive Officers, are fully vested in the Bank's contribution to the plan. In the event the executive is terminated involuntarily or resigns for good reason within 24 months following a change in control, the Bank is required to make additional annual contributions the lesser of: (1) three years or (2) the number of years remaining until the executive's benefit age, subject to potential reduction to avoid an excess parachute payment under Code Section 280G. In the event of the executive's death, disability or termination within 24 months after a change in control, the executive's account will be paid in a lump sum to the executive or his beneficiary, as applicable. In

the event the executive is entitled to a benefit from the SERP due to retirement or other termination of employment, the benefit will be paid either in a lump sum or in 10 annual installments as detailed in his or her participant agreement. At December 31, 2019 and 2018, other liabilities included \$836,000 and \$745,000, respectively, accrued under this plan.

NOTE 15: STOCK BASED COMPENSATION PLANS

All share and per share values have been adjusted, where appropriate, by the 1.6472 exchange rate used in the Conversion and Offering that occurred on October 16, 2014.

April 2010 Stock Option Grants

In June 2011, the board of directors of the Company approved the grant of stock option awards to its directors and executive officers under the 2010 Stock Option Plan that had 247,080 shares authorized for award. A total of 74,124 stock option awards were granted to the nine directors of the Company, at that time, and 123,540 stock option awards, in total, were granted to the Chief Executive Officer and the Company's then four senior vice presidents. The awards vested ratably over five years (20% per year for each year of the participant's service with the Company) with an expiration date ten years from the date of the grant, or June 2021. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 2.2%; volatility factors of the expected market price of the Company's common stock of 0.45; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.49%. Based upon these assumptions, the weighted average fair value of options granted was \$2.29.

In July 2013, the board of directors of the Company approved the grant of 16,472 stock option awards in total to two newly elected directors of the Company. The awards vested ratably over five years (20% per year for each year of the participant's service with the Company) with an expiration date ten years from the date of the grant, or July 2023. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 2.0%; volatility factors of the expected market price of the Company's common stock of 0.45; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.0%. Based upon these assumptions, the weighted average fair value of options granted was \$3.69.

In November 2015, the board of directors of the Company approved the grant of 16,472 stock option awards in total to two newly elected directors of the Company. The awards vest ratably over five years (20% per year for each year of the participant's service with the Company) and will expire ten years from the date of the grant, or November 2025. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 1.9%; volatility factors of the expected market price of the Company's common stock of 0.23; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.4%. Based upon these assumptions, the weighted average fair value of options granted was \$2.56.

In April 2016, the board of directors of the Company approved the grant of 47,768 stock option awards in total to three officers and one recently promoted senior officer. The awards vest ratably over five years (20% per year for each year of the participant's service with the Company) and will expire ten years from the date of the grant, or April 2026. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 1.6%; volatility factors of the expected market price of the Company's common stock of 0.32; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.55%. Based upon these assumptions, the weighted average fair value of options granted was \$3.17.

May 2016 Stock Option Grants

In May 2016, the board of directors of the Company approved the grant of stock option awards to its directors, executive officers, senior officers and officers under the 2016 Equity Incentive Plan that was approved at the Annual Meeting of Shareholders on May 4, 2016 when 263,605 shares were authorized for award.

A total of 79,083 stock option awards were granted to the nine directors of the Company and 44,812 stock option awards, in total, were granted to thirteen officers. The awards vest ratably over five years (20% per year for each year of the participant's service with the Company) and will expire ten years from the date of the grant, or May 2026. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 1.6%; volatility factors of the expected market price of the Company's common stock of 0.32; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.55%. Based upon these assumptions, the weighted average fair value of options granted was \$3.32.

A total of 92,261 stock option awards were granted to the Chief Executive Officer, two executive officers and three senior officers. The awards vest ratably over seven years (approximately 14.28% per year for each year of the participant's service with the Company) with the exception of one senior officer whose awards vested upon retirement on August 1, 2017 and will expire ten years from the date of the grant, or May 2026. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 1.7%; volatility factors of the expected market price of the Company's common stock of 0.32; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.55%. Based upon these assumptions, the weighted average fair value of options granted was \$3.59.

Activity in the stock option plans is as follows:

	Options Outstanding			Shares Exercisable			
(Shares in thousands)	Number of Shares	A	eighted verage cise Price	Number of Shares	Α	eighted verage cise Price	
Outstanding at December 31, 2017	395	\$	9.68	168	\$	7.61	
Granted		\$			\$		
Newly vested	_		11.05	52		_	
Exercised	(67)		_	(67)		_	
Expired	(3)		11.35				
Outstanding at December 31, 2018	325	\$	10.50	153	\$	9.65	
Granted	_	\$	_	_	\$	_	
Newly vested	_		11.10	62		_	
Exercised	(21)		_	(21)		_	
Expired	(1)		11.35				
Outstanding at December 31, 2019	303	\$	10.51	194	\$	10.04	

The aggregate intrinsic value of a stock option represents the total pre-tax intrinsic value (the amount by which the current market value of the underlying stock exceeds the exercise price of the option) that would have been received by the option holders had all option holders exercised their options prior to the expiration date. The intrinsic value can change based on fluctuations in the market value of the Company's stock. At December 31, 2019, the intrinsic value of the stock options was \$1.0 million.

At December 31, 2019, the average remaining contractual life of outstanding options and shares exercisable were 5.7 years and 5.3 years, respectively.

May 2016 Restricted Stock Unit Grants

In May 2016, the board of directors of the Company approved the grant of restricted stock units to its directors, executive officers, senior officers and officers under the 2016 Equity Incentive Plan that was approved at the Annual Meeting of Shareholders on May 4, 2016 when 105,442 shares were authorized for award. A total of 31,635 restricted stock units were granted to the nine directors of the Company and 8,436 restricted stock units, in total, were granted to two officers. The units vest ratably over five years (20% per year for each year of the participant's service with the Company).

A total of 46,570 restricted stock units, in total, were granted to the Chief Executive Officer, two executive officers and three senior officers. The units vest ratably over seven years (approximately 14.28% per year for each year of the participant's service with the Company) with the exception of one senior officer whose units vested upon retirement on August 1, 2017.

The compensation expense of the stock option awards and restricted stock units is based on the fair value of the instruments on the date of grant. The Company recorded compensation expense in the amount of \$291,000 and \$398,000 in 2019 and 2018, respectively, and is expected to record \$289,000, \$153,000, \$92,000 and \$31,000 in 2020 through 2023.

NOTE 16: EMPLOYEE STOCK OWNERSHIP PLAN

The Bank established the Pathfinder Bank Employee Stock Ownership Plan ("Plan") to purchase stock of the Company for the benefit of its employees. In July 2011, the Plan received a \$1.1 million loan from Community Bank, N.A., guaranteed by the Company, to fund the Plan's purchase of 125,000 shares of the Company's treasury stock. The loan was being repaid in equal quarterly installments of principal plus interest over ten years beginning October 1, 2011. Interest accrued at the Wall Street Journal Prime Rate plus 1.00%, and was secured by the unallocated shares of the ESOP stock. This loan was refinanced in connection with the Conversion and Offering that occurred on October 16, 2014.

In connection with the Conversion and Offering, the ESOP purchased 105,442 shares issued in the offering by obtaining a loan from the Company which was used to purchase both the additional shares and refinance the remaining outstanding balance on the loan from Community Bank N.A. There were 138,982.5 shares associated with the refinanced loan resulting in a total of 244,424.5 shares associated with the new loan provided by the Company.

The ESOP loan from the Company has a ten year term and is being repaid in equal payments of principal and interest under a fixed rate of interest equal to 3.25% which was the prime rate of interest on the date of the closing of the offering. This ESOP loan from the Company, also referred to as an internally leveraged ESOP, does not appear as a liability on the Company's consolidated statement of condition as of December 31, 2019 in accordance with ASC 718-40-25-9d.

In accordance with the payment of principal on the loan, a proportionate number of shares are allocated to the employees over the ten year time horizon of the loan. Participants' vesting interest in the shares of Company stock is at the rate of 20% per year. Compensation expense is recorded based on the number of shares released to the participants times the average market value of the Company's stock over that same period. Dividends on unallocated shares, recorded as compensation expense on the income statement, are made available to the participants' account. The Company recorded \$369,000 and \$411,000 in compensation expense in 2019 and 2018, respectively, including \$30,000 and \$36,000 for dividends on unallocated shares in these same time periods. At December 31, 2019, there were 116,102 unearned ESOP shares with a fair value of \$1.6 million.

NOTE 17: INCOME TAXES

The provision for income taxes for the years ended December 31, is as follows:

(In thousands)	2019	2018
Current	\$1,181	\$203
Deferred	(16)	343
	\$1,165	\$546

The provision for income taxes includes the following

(In thousands)	2019	2018
Federal Income Tax	\$1,244	\$ 714
State Tax	<u>(79)</u>	(168)
	\$1,165	\$ 546

The components of the net deferred tax asset, included in other assets as of December 31, are as follows:

(In thousands)	2019	2018
Assets:		
Deferred compensation	\$ 970	\$ 895
Allowance for loan losses	2,266	1,909
Postretirement benefits	108	119
Subordinated loan interest	22	23
Investment securities	77	1,002
Loan origination fees	_	35
Held-to-maturity securities	14	21
Stock-based compensation	101	166
Community service activities	22	153
Other	587	374
Total	4,167	4,697
Liabilities:		
Prepaid pension	(1,331)	(1,157)
Depreciation	(1,667)	(1,441)
Accretion	(118)	(177)
Intangible assets	(1,004)	(1,004)
Mortgage servicing rights	(5)	(4)
Prepaid expenses and transaction fees	(103)	(69)
Loan origination fees	(29)	_
Total	(4,257)	(3,852)
	(90)	845
Less: deferred tax asset valuation allowance	(136)	
Net deferred tax (liability) asset	\$ (226)	\$ 845

Realization of deferred tax assets is dependent upon the generation of future taxable income or the existence of sufficient taxable income within the carry back period. A valuation allowance is provided when it is more likely than not that some portion, or all of the deferred tax assets, will not be realized. In assessing the need for a valuation allowance, management considers the scheduled reversal of the deferred tax liabilities, the level of historical taxable income and the projected future level of taxable income over the periods in which the temporary differences comprising the deferred tax assets will be deductible.

Deferred income tax assets and liabilities are determined using the liability method. Under this method, the net deferred tax asset or liability is recognized for the future tax consequences. This is attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases as well as net operating and capital loss carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income tax expense in the period that includes the enactment date. If current available evidence about the future raises doubt about the likelihood of a deferred tax asset being realized, a valuation allowance is established. The judgment about the level of future taxable income, including that which is considered capital, is inherently subjective and is reviewed on a continual basis as regulatory and business factors change.

Banking corporations operating in New York State are taxed under the New York State General Business Corporation Franchise Tax provisions. Under this New York tax law, the tax rate on the business income base is 6.5%. However, various modifications are available to community banks (defined as banks with less than \$8 billion in total assets) regarding certain deductions associated with interest income. However, various modifications are available to community banks (defined as banks with less than \$8 billion in total assets) regarding certain deductions associated with interest income. Commencing on January 1, 2018, the Company changed its elected interest income subtraction methodology under which its New York income tax expense is calculated. This change in the Company's interest income subtraction election was adopted following changes to the New York State Tax Code enacted in 2015 and resulted in a reduction of the Company's effective income tax rate in New York beginning in 2018. It is anticipated that the Company's New York effective income tax rate will remain substantially at 0.0% in future periods under current law. In the first quarter of 2019, the Company established, through a charge to earnings, a valuation allowance in the amount of \$136,000 in order to establish a reserve against deferred tax assets related to New York income taxes. The establishment of this reserve increased the Company's effective tax rate by 2.5% in 2019. This reserve was established as the items giving rise to the deferred tax assets related to New York taxes are unlikely to further reduce the Company's income taxes in the future following the adoption of the new subtraction methodology. There were no valuation allowances against deferred tax assets at December 31, 2018

In 2019, the Company's effective tax rate was 21.4%, as compared to 11.9% in 2018. A reconciliation of the federal statutory income tax rate to the effective income tax rate for the years ended December 31, is as follows:

	2019	2018
Federal statutory income tax rate	21.0%	21.0%
State tax, net of federal benefit	(1.5)	(3.7)
Tax-exempt interest income	(0.9)	(4.3)
Increase in value of bank owned life insurance less premiums paid	(1.7)	(1.9)
Change in valuation allowance	2.5	_
Other	1.9	0.9
Effective income tax rate – Pathfinder Bancorp, Inc.	21.3%	12.0%
Minority interest	0.1	(0.1)
Effective income tax rate	21.4%	11.9%

NOTE 18: COMMITMENTS AND CONTINGENCIES

The Company is a party to financial instruments with off-balance sheet risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit and standby letters of credit. Such commitments involve, to varying degrees, elements of credit risk in excess of the amount recognized in the consolidated statement of condition. The contractual amount of those commitments to extend credit reflects the extent of involvement the Company has in this particular class of financial instrument. The Company's exposure to credit loss in the event of nonperformance by the other party to the financial

instrument for commitments to extend credit is represented by the contractual amount of the instrument. The Company uses the same credit policies in making commitments as it does for on-balance sheet instruments.

At December 31, 2019 and 2018, the following financial instruments were outstanding whose contract amounts represent credit risk:

	Contract	t Amount
(In thousands)	2019	2018
Commitments to grant loans	\$47,606	\$37,354
Unfunded commitments under lines of credit	81,038	74,284
Unfunded commitments related to construction loans in progress	3,214	5,058
Standby letters of credit	2,082	2,007

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since some of the commitment amounts are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. The Company evaluates each customer's creditworthiness on a case-by-case basis. The amount of collateral obtained, if deemed necessary by the Company upon extension of credit, is based on management's credit evaluation of the counter party. Collateral held varies but may include residential real estate and income-producing commercial properties. Loan commitments outstanding at December 31, 2019 with variable interest rates and fixed interest rates amounted to approximately \$122.8 million and \$11.1 million, respectively. These outstanding loan commitments carry current market rates.

Unfunded commitments under standby letters of credit, revolving credit lines and overdraft protection agreements are commitments for possible future extensions of credit to existing customers. These lines of credit usually do not contain a specified maturity date and may not be drawn upon to the total extent to which the Company is committed.

Letters of credit written are conditional commitments issued by the Company to guarantee the performance of a customer to a third party. Generally, all letters of credit, when issued have expiration dates within one year. The credit risk involved in issuing letters of credit is essentially the same as those that are involved in extending loan facilities to customers. The Company generally holds collateral and/or personal guarantees supporting these commitments. Management believes that the proceeds obtained through a liquidation of collateral and the enforcement of guarantees would be sufficient to cover the potential amount of future payments required under the corresponding guarantees.

NOTE 19: DIVIDENDS AND RESTRICTIONS

The Company's ability to pay dividends to its shareholders is largely dependent on the Bank's ability to pay dividends to the Company. In addition to state law requirements and the capital requirements discussed in Note 20, federal statutes, regulations and policies limit the circumstances under which the Bank may pay dividends. The amount of retained earnings legally available under these regulations approximated \$14.1 million as of December 31, 2019. Dividends paid by the Bank to the Company would be prohibited if the effect thereof would cause the Bank's capital to be reduced below applicable minimum capital requirements. The Bank made no dividend payments to the Company in the years ended December 31, 2019, December 31, 2018 or December 31, 2017.

Capital adequacy is evaluated primarily by the use of ratios which measure capital against total assets, as well as against total assets that are weighted based on defined risk characteristics. The Company's goal is to maintain a strong capital position, consistent with the risk profile of its banking operations. This strong capital position serves to support growth and expansion activities while at the same time exceeding regulatory standards. At

December 31, 2019, the Bank met the regulatory definition of a "well-capitalized" institution, i.e. a leverage capital ratio exceeding 5%, a Tier 1 risk-based capital ratio exceeding 8%, Tier 1 common equity exceeding 6.5%, and a total risk-based capital ratio exceeding 10%.

In addition to establishing the minimum regulatory capital requirements, the regulations limit capital distributions and certain discretionary bonus payments to management if the institution does not hold a "capital conservation buffer" consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets above the amount necessary to meet its minimum risk-based capital requirements. The buffer is separate from the capital ratios required under the Prompt Corrective Action ("PCA") standards. In order to avoid these restrictions, the capital conservation buffer effectively increases the minimum levels of the following capital to risk-weighted assets ratios: (1) Core Capital, (2) Total Capital and (3) Common Equity. The capital conservation buffer requirement is now fully implemented at 2.5% of risk-weighted assets as of January 1, 2019. At December 31, 2019, the Bank exceeded all regulatory required minimum capital ratios, including the capital buffer requirements.

NOTE 20: REGULATORY MATTERS

The Bank is subject to various regulatory capital requirements administered by the federal banking agencies. Failure to meet minimum capital requirements can initiate certain mandatory and possibly additional discretionary actions by regulators that, if undertaken, could have a direct material effect on the Company's consolidated financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Bank must meet specific capital guidelines that involve quantitative measures of its assets, liabilities, and certain off-balance sheet items as calculated under regulatory accounting practices. The capital amounts and classifications are also subject to qualitative judgments by the regulators about components, risk weightings, and other factors.

Quantitative measures established by regulation to ensure capital adequacy require the Bank to maintain amounts and ratios (set forth in the table below) of total and Tier 1 capital (as defined in the regulations) to risk-weighted assets (as defined), and of Tier 1 capital (as defined) to average assets (as defined).

As of December 31, 2019, the Bank's most recent notification from the Federal Deposit Insurance Corporation categorized the Bank as "well-capitalized", under the regulatory framework for prompt corrective action. To be categorized as "well-capitalized", the Bank must maintain total risk-based, Tier 1 risk-based and Tier 1 leverage ratios as set forth in the tables below. There are no conditions or events since that notification that management believes have changed the Bank's category.

As noted above, the regulations also impose a "capital conservation buffer" consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets above the amount necessary to meet its minimum risk-based capital requirements. The buffer is separate from the capital ratios required under the Prompt Corrective Action ("PCA") standards and imposes restrictions on dividend distributions and discretionary bonuses. In order to avoid these restrictions, the capital conservation buffer effectively increases the minimum levels of the following capital to risk-weighted assets ratios: (1) Core Capital, (2) Total Capital and (3) Common Equity. The capital conservation buffer requirement is now fully implemented at 2.5% of risk-weighted assets as of January 1, 2019. At December 31, 2019, the Bank exceeded all regulatory required minimum capital ratios, including the capital buffer requirements.

The Bank's actual capital amounts and ratios as of December 31, 2019 and 2018 are presented in the following table.

					Minimum "Well-Capi			
			Minimun	ı For	Under Pi		Minimu	m for
			Capital Ade		Correc		Capital Ad	
	Actu		Purpos		Provisi		With B	
(Dollars in thousands)	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
As of December 31, 2019:								
Total Core Capital (to Risk-Weighted Assets)	\$95,093	12.28%	\$61,934	8.00%	\$77,418	10.00%	\$81,289	10.50%
Tier 1 Capital (to Risk-Weighted Assets)	\$86,424	11.16%	\$46,451	6.00%	\$61,934	8.00%	\$65,805	8.50%
Tier 1 Common Equity (to Risk-Weighted Assets)	\$86,424	11.16%	\$34,838	4.50%	\$50,322	6.50%	\$54,192	7.00%
Tier 1 Capital (to Assets)	\$86,424	8.20%	\$42,175	4.00%	\$52,719	5.00%	\$52,719	5.00%
As of December 31, 2018:								
Total Core Capital (to Risk-Weighted Assets)	\$83,177	13.69%	\$48,593	8.00%	\$60,741	10.00%	\$63,778	10.50%
Tier 1 Capital (to Risk-Weighted Assets)	\$75,871	12.49%	\$36,445	6.00%	\$48,593	8.00%	\$51,630	8.50%
Tier 1 Common Equity (to Risk-Weighted Assets)	\$75,871	12.49%	\$27,334	4.50%	\$39,482	6.50%	\$42,519	7.00%
Tier 1 Capital (to Assets)	\$75,871	8.31%	\$36,522	4.00%	\$45,652	5.00%	\$45,652	5.00%

The Company's goal is to maintain a strong capital position, consistent with the risk profile of its subsidiary banks that supports growth and expansion activities while at the same time exceeding regulatory standards. At December 31, 2019, the Bank exceeded all regulatory required minimum capital ratios and met the regulatory definition of a "well-capitalized" institution, i.e. a leverage capital ratio exceeding 5%, a Tier 1 risk-based capital ratio exceeding 6% and a total risk-based capital ratio exceeding 10%.

The Bank is required to maintain average balances on hand or with the Federal Reserve Bank. At December 31, 2019 and 2018, these reserve balances amounted to \$-0- and \$4.0 million, respectively and are included in cash and due from banks in the statement of condition.

NOTE 21: INTEREST RATE DERIVATIVE

The Company is exposed to certain risks from both its business operations and economic conditions. The Company principally manages its exposures to a wide variety of business and operational risks through the management of its core business activities. As part of the Company's overall risk management processes, the Company manages its economic risks, including interest rate, liquidity and credit risk, primarily by managing the amount, sources and duration of certain balance sheet assets and liabilities. In the normal course of business, the Company also uses derivative financial instruments as an additional risk management tool. Financial derivatives are recorded at fair value as other assets.

Among the array of interest rate derivative transactions potentially available to the Company are interest rate swaps. The Company uses interest rate swaps as part of its interest rate risk management strategy. Interest rate swaps, designated as fair value hedges, involve the receipt of variable amounts from a counterparty in exchange for the Company making fixed payments over the life of the agreements without the exchange of the underlying notional amount. The gain or loss on the derivative as well as the offsetting gain of loss on the hedged item attributable to the hedged risk are recognized in earnings. The Company entered into a pay-fixed/receive variable interest rate swap with a notional amount of \$9.2 million in April 2019, which was designated as a fair value hedge associated with specific pools within the Company's fixed-rate consumer loan portfolio.

As of December 31, 2019, the following amounts were recorded on the balance sheet related to the cumulative basis adjustments for fair value hedges:

			Cumulative	Amount of
			Fair Value	e Hedging
			Adjustment	Included in
	Carrying	Amount of the	The Carryin	g Amount of
	Hedg	ed Assets at	the Hedge	d Assets at
(In thousands)	Decem	nber 31, 2019	December	r 31, 2019
Line item on the balance sheet in which the hedged item is included:				
Loans receivable (1)	\$	19,254	\$	75

(1) These amounts include the amortized cost basis of the closed portfolio used to designate the hedging relationship in which the hedged item is the remaining amortized cost of the last layer expected to be remaining at the end of the hedging relationship. At December 31, 2019, the amortized cost of the basis of the closed portfolio used in the hedging relationship was \$19.3 million, the cumulative basis adjustment associated with the hedging relationship was \$75,000, and the amount of the designated hedged item was \$9.2 million.

At December 31, 2019, the fair value of the derivative resulted in a net liability position of \$92,000 under the agreement, recorded by the Company in other liabilities. The Company had no derivative agreements in place at December 31, 2018.

The Company manages its potential credit exposure on interest rate swap transactions by entering into a bilateral credit support agreements with each counterparty. These agreements require collateralization of credit exposures beyond specified minimum threshold amounts. The Company's agreement with its interest rate swap counterparty contains a provision whereby if either party defaults on any of its indebtedness, then that party could also be declared in default on its derivative obligations. The agreement with the Company's derivative counterparty also includes certain other provisions that if not met, could result in the Company or the counterparty being declared in default. If either the Company or the counterparty were to be declared in default, the other party to the agreement can terminate the derivative position and require settlement of all obligations as specifically outlined within the terms of the agreement.

NOTE 22: FAIR VALUE MEASUREMENTS AND DISCLOSURES

Accounting guidance related to fair value measurements and disclosures specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions. These two types of inputs have created the following fair value hierarchy:

Level 1 - Quoted prices (unadjusted) for identical assets or liabilities in active markets that the entity has the ability to access as of the measurement date.

Level 2 – Quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.

Level 3 – Model-derived valuations in which one or more significant inputs or significant value drivers are unobservable.

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

In determining fair value, the Company utilizes valuation techniques that maximize the use of observable inputs, minimize the use of unobservable inputs, to the extent possible, and considers counterparty credit risk in its assessment of fair value.

The Company used the following methods and significant assumptions to estimate fair value:

Investment securities: The fair values of securities available-for-sale are obtained from an independent third party and are based on quoted prices on nationally recognized securities exchanges where available (Level 1). If quoted prices are not available, fair values are measured by utilizing matrix pricing, which is a mathematical technique used widely in the industry to value debt securities without relying exclusively on quoted prices for specific securities but rather by relying on the securities' relationship to other benchmark quoted securities (Level 2). Management made no adjustment to the fair value quotes that were received from the independent third party pricing service. Level 3 securities are assets whose fair value cannot be determined by using observable measures, such as market prices or pricing models. Level 3 assets are typically very illiquid, and fair values can only be calculated using estimates or risk-adjusted value ranges. Management applies known factors, such as currently applicable discount rates, to the valuation of those investments in order to determine fair value at the reporting date.

The Company holds two corporate investment securities with an aggregate amortized historical cost of \$4.8 million and an aggregate fair market value of \$4.9 million as of December 31, 2019. These securities have valuations that are determined using published net asset values (NAV) derived by analyses of the securities' underlying assets. These securities are comprised primarily of broadly-diversified real estate and adjustable-rate senior secured business loans and are traded in secondary markets on an infrequent basis. While these securities are redeemable at least annually through tender offers made by their respective issuers, the liquidation value of the securities may be below their stated NAVs and also subject to restrictions as to the amount of securities that can be redeemed at any single scheduled redemption. The Company anticipates that these securities will be redeemed by their respective issuers on indeterminate future dates as a consequence of the ultimate liquidation strategies employed by the management of these investments.

Interest rate swap derivative: The fair value of the interest rate swap derivative is calculated based on a discounted cash flow model. All future floating cash flows are projected and both floating and fixed cash flows are discounted to the valuation date. The curve utilized for discounting and projecting is built by obtaining publicly available third party market quotes for various swap maturity terms.

Impaired loans: Impaired loans are those loans in which the Company has measured impairment based on the fair value of the loan's collateral or the discounted value of expected future cash flows. Fair value is generally determined based upon market value evaluations by third parties of the properties and/or estimates by management of working capital collateral or discounted cash flows based upon expected proceeds. These appraisals may include up to three approaches to value: the sales comparison approach, the income approach (for income-producing property), and the cost approach. Management modifies the appraised values, if needed, to take into account recent developments in the market or other factors, such as, changes in absorption rates or market conditions from the time of valuation and anticipated sales values considering management's plans for disposition. Such modifications to the appraised values could result in lower valuations of such collateral. Estimated costs to sell are based on current amounts of disposal costs for similar assets. These measurements are classified as Level 3 within the valuation hierarchy. Impaired loans are subject to nonrecurring fair value adjustment upon initial recognition or subsequent impairment. A portion of the allowance for loan losses is allocated to impaired loans if the value of such loans is deemed to be less than the unpaid balance.

Foreclosed real estate: Fair values for foreclosed real estate are initially recorded based on market value evaluations by third parties, less costs to sell ("initial cost basis"). Any write-downs required when the related loan receivable is exchanged for the underlying real estate collateral at the time of transfer to foreclosed real estate are charged to the allowance for loan losses. Values are derived from appraisals, similar to impaired loans,

of underlying collateral or discounted cash flow analysis. Subsequent to foreclosure, valuations are updated periodically and assets are marked to current fair value, not to exceed the initial cost basis. In the determination of fair value subsequent to foreclosure, management also considers other factors or recent developments, such as, changes in absorption rates and market conditions from the time of valuation and anticipated sales values considering management's plans for disposition. Either change could result in adjustment to lower the property value estimates indicated in the appraisals. These measurements are classified as Level 3 within the fair value hierarchy.

The following tables summarize assets measured at fair value on a recurring basis as of December 31, segregated by the level of valuation inputs within the hierarchy utilized to measure fair value:

		December 31, 2019		
(In thousands)	Level 1	Level 2	Level 3	Total Fair Value
Available-for-Sale Portfolio	<u>Bever 1</u>	<u> Bever 2</u>	Bevers	<u>varue</u>
Debt investment securities:				
US Treasury, agencies and GSEs	\$ —	\$ 16,820	\$ —	\$ 16,820
State and political subdivisions	_	1,736	_	1,736
Corporate	_	7,631	_	7,631
Asset backed securities	_	13,232		13,232
Residential mortgage-backed – US agency	_	18,980	_	18,980
Collateralized mortgage obligations – US agency	_	30,785		30,785
Collateralized mortgage obligations – Private label	<u> </u>	16,821		16,821
Total		106,005	_	106,005
Corporate measured at NAV	_	_	_	4,923
Total available-for-sale securities	\$ <u> </u>	\$106,005	\$ —	\$110,928
Marketable equity securities	<u>\$ —</u>	\$ 534	\$ —	\$ 534
Interest rate swap derivative	<u>\$ —</u>	\$ (92)	<u>\$ —</u>	\$ (92)
		Decembe	er 31, 2018	
(In thousands)	Level 1	Level 2	Level 3	Total Fair Value
Available-for-Sale Portfolio				
Debt investment securities:				
US Treasury, agencies and GSEs	\$ —	\$ 17,031	\$ —	\$ 17,031
State and political subdivisions	_	23,065	_	23,065
Corporate	_	12,141	_	12,141
Asset backed securities	_	18,119	_	18,119
Residential mortgage-backed – US agency	_	31,666	_	31,666
Collateralized mortgage obligations – US agency	_	46,441	_	46,441
Collateralized mortgage obligations – Private label		23,936		23,936
Total	_	172,399	_	172,399
Corporate measured at NAV				5,059
Total available-for-sale securities	<u>\$ —</u>	\$172,399	\$ —	\$177,458
Marketable equity securities	\$ —	\$ 453	\$ —	\$ 453

The following tables summarize assets measured at fair value on a nonrecurring basis as of December 31, segregated by the level of valuation inputs within the hierarchy utilized to measure fair value:

		Decemb	er 31, 2019	
(In thousands)	Level 1	Level 2	Level 3	Total Fair Value
Impaired loans	\$ —	\$ —	\$3,105	\$ 3,105
Foreclosed real estate	\$ —	\$ —	\$ —	\$ —
		Decemb	er 31, 2018	
				Total Fair
(In thousands)	Level 1	Level 2	Level 3	Value
Impaired loans	\$ —	\$ —	\$1,098	\$ 1,098
Foreclosed real estate	\$ —	\$ —	\$1,173	\$ 1,173

The following table presents additional quantitative information about assets measured at fair value on a nonrecurring basis and for which Level 3 inputs were used to determine fair value.

_	Quantitative Information about Level 3 Fair Value Measurements			
	Valuation Techniques	Unobservable Input	Range (Weighted Avg.)	
At December 31, 2019				
Impaired loans	Appraisal of collateral	Appraisal Adjustments	5% – 20% (9%)	
	(Sales Approach)	Costs to Sell	7% –13% (11%)	
	Discounted Cash Flow			
Foreclosed real estate	Appraisal of collateral	Appraisal Adjustments	15% –15% (15%)	
	(Sales Approach)	Costs to Sell	6% – 9% (8%)	
_	·	ormation about Level 3 Fair Value Measurements		
-	Quantitative Info Valuation Techniques	ormation about Level 3 Fair Value Measurements Unobservable Input	Range (Weighted Avg.)	
At December 31, 2018	Valuation	Unobservable		
At December 31, 2018 Impaired loans	Valuation	Unobservable		
	Valuation Techniques	Unobservable Input	(Weighted Avg.)	
	Valuation Techniques Appraisal of collateral	Unobservable Input Appraisal Adjustments	(Weighted Avg.) 5% – 15% (6%)	
	Valuation Techniques Appraisal of collateral (Sales Approach)	Unobservable Input Appraisal Adjustments	(Weighted Avg.) 5% – 15% (6%)	

There have been no transfer of assets into or out of any fair value measurement during the year ended December 31, 2019.

Required disclosures include fair value information of financial instruments, whether or not recognized in the consolidated statement of condition, for which it is practicable to estimate that value. In cases where quoted market prices are not available, fair values are based on estimates using present value or other valuation techniques. Those techniques are significantly affected by the assumptions used, including the discount rate and estimates of future cash flows. In that regard, the derived fair value estimates cannot be substantiated by comparison to independent markets and, in many cases, could not be realized in immediate settlement of the instrument.

The Company has various processes and controls in place to ensure that fair value is reasonably estimated. The Company performs due diligence procedures over third-party pricing service providers in order to support their use in the valuation process.

While the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

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

FASB ASC Topic 820 for Fair Value Measurements and Disclosures, the financial assets and liabilities were valued at a price that represents the Company's exit price or the price at which these instruments would be sold or transferred.

The following information should not be interpreted as an estimate of the fair value of the entire Company since a fair value calculation is only provided for a limited portion of the Company's assets and liabilities. Due to a wide range of valuation techniques and the degree of subjectivity used in making the estimates, comparisons between the Company's disclosures and those of other companies may not be meaningful. The Company, in estimating its fair value disclosures for financial instruments, used the following methods and assumptions:

Cash and cash equivalents – The carrying amounts of these assets approximate their fair value and are classified as Level 1.

Interest earning time deposits – The carrying amounts of these assets approximate their fair value and are classified as Level 1.

Investment securities – The fair values of securities available-for-sale and held-to-maturity are obtained from an independent third party and are based on quoted prices on nationally recognized exchange where available (Level 1). If quoted prices are not available, fair values are measured by utilizing matrix pricing, which is a mathematical technique used widely in the industry to value debt securities without relying exclusively on quoted prices for specific securities, but rather by relying on the securities' relationship to other benchmark quoted securities (Level 2). Management made no adjustment to the fair value quotes that were received from the independent third party pricing service. Level 3 securities are assets whose fair value cannot be determined by using observable measures, such as market prices or pricing models. Level 3 assets are typically very illiquid, and fair values can only be calculated using estimates or risk-adjusted value ranges. Management applies known factors, such as currently applicable discount rates, to the valuation of those investments in order to determine fair value at the reporting date.

The Company holds two corporate investment securities with an aggregate amortized historical cost of \$4.8 million and an aggregate fair market value of \$4.9 million as of December 31, 2019. These securities have valuations that are determined using published net asset values (NAV) derived by analyses of the securities' underlying assets. These securities are comprised primarily of broadly-diversified real estate and adjustable-rate senior secured business loans and are traded in secondary markets on an infrequent basis. While these securities are redeemable at least annually through tender offers made by their respective issuers, the liquidation value of the securities may be below their stated NAVs and also subject to restrictions as to the amount of securities that can be redeemed at any single scheduled redemption. The Company anticipates that these securities will be redeemed by their respective issuers on indeterminate future dates as a consequence of the ultimate liquidation strategies employed by the management of these investments.

Federal Home Loan Bank stock – The carrying amount of these assets approximates their fair value and are classified as Level 2.

Net loans – For variable-rate loans that re-price frequently, fair value is based on carrying amounts. The fair value of other loans (for example, fixed-rate commercial real estate loans, mortgage loans, and commercial and industrial loans) is estimated using discounted cash flow analysis, based on interest rates currently being offered in the market for loans with similar terms to borrowers of similar credit quality. Loan value estimates include judgments based on expected prepayment rates. The measurement of the fair value of loans, including impaired loans, is classified within Level 3 of the fair value hierarchy.

Accrued interest receivable and payable – The carrying amount of these assets approximates their fair value and are classified as Level 1.

Deposits – The fair values disclosed for demand deposits (e.g., interest-bearing and noninterest-bearing checking, passbook savings and certain types of money management accounts) are, by definition, equal to the amount payable on demand at the reporting date (i.e., their carrying amounts) and are classified within Level 1 of the fair value hierarchy. Fair values for fixed-rate certificates of deposit are estimated using a discounted cash flow calculation that applies interest rates currently being offered in the market on certificates of deposits to a schedule of aggregated expected monthly maturities on time deposits. Measurements of the fair value of time deposits are classified within Level 2 of the fair value hierarchy.

Borrowings – Fixed/variable term "bullet" structures are valued using a replacement cost of funds approach. These borrowings are discounted to the FHLBNY advance curve. Option structured borrowings' fair values are determined by the FHLB for borrowings that include a call or conversion option. If market pricing is not available from this source, current market indications from the FHLBNY are obtained and the borrowings are discounted to the FHLBNY advance curve less an appropriate spread to adjust for the option. These measurements are classified as Level 2 within the fair value hierarchy.

Subordinated loans – The Company secures quotes from its pricing service based on a discounted cash flow methodology or utilizes observations of recent highly-similar transactions which result in a Level 2 classification.

Interest rate swap derivative: The fair value of the interest rate swap derivative is calculated based on a discounted cash flow model. All future floating cash flows are projected and both floating and fixed cash flows are discounted to the valuation date. The curve utilized for discounting and projecting is built by obtaining publicly available third party market quotes for various swap maturity terms.

The carrying amounts and fair values of the Company's financial instruments as of December 31 are presented in the following table:

		December 31, 2019		December 31, 2018	
	Fair Value	Carrying	Estimated	Carrying	Estimated
(In thousands)	Hierarchy	Amounts	Fair Values	Amounts	Fair Values
Financial assets:					
Cash and cash equivalents	1	\$ 20,160	\$ 20,160	\$ 26,316	\$ 26,316
Investment securities – available-for-sale	2	106,005	106,005	172,399	172,399
Investment securities – available-for-sale	NAV	4,923	4,923	5,059	5,059
Investment securities – marketable equity	2	534	534	453	453
Investment securities – held-to-maturity	2	122,988	124,148	53,908	53,769
Federal Home Loan Bank stock	2	4,834	4,834	5,937	5,937
Net loans	3	772,782	767,654	612,964	601,789
Accrued interest receivable	1	3,712	3,712	3,068	3,068
Financial liabilities:					
Demand Deposits, Savings, NOW and MMDA	1	\$460,293	\$460,293	\$450,267	\$450,267
Time Deposits	2	421,600	422,409	276,793	275,727
Borrowings	2	93,125	93,643	118,534	118,379
Subordinated loans	2	15,128	14,921	15,094	14,485
Accrued interest payable	2	396	396	304	304
Interest rate swap derivative	2	92	92	_	_

NOTE 23: PARENT COMPANY - FINANCIAL INFORMATION

The following represents the condensed financial information of Pathfinder Bancorp, Inc. as of and for the years ended December 31:

Statements of Condition (In thousands)	2019	2018
Assets		
Cash	\$ 14,514	\$ 3,063
Investments	534	453
Investment in bank subsidiary	88,372	74,769
Investment in non-bank subsidiary	155	193
Other assets	3,193	1,961
Total assets	\$106,768	\$80,439
Liabilities and Shareholders' Equity	<u> </u>	
Accrued liabilities	\$ 971	\$ 886
Subordinated loans	15,128	15,094
Shareholders' equity	90,669	64,459
Total liabilities and shareholders' equity	\$106,768	\$80,439

Statements of Income (In thousands)	2019	2018
Income		
Dividends from non-bank subsidiary	\$ 6	\$ 6
Gains (losses) on marketable equity securities	81	(62)
Operating, net	79	_
Total income (loss)	166	(56)
Expenses		
Interest	863	846
Operating, net	337	175
Total expenses	1,200	1,021
Loss before taxes and equity in undistributed net income of subsidiaries	(1,034)	(1,077)
Tax benefit	235	340
Loss before equity in undistributed net income of subsidiaries	(799)	(737)
Equity in undistributed net income of subsidiaries	5,075	4,768
Net income	\$ 4,276	\$ 4,031
Statements of Cash Flows (In thousands)	2019	2018

Statements of Cash Flows (In thousands)	2019	2018
Operating Activities		
Net Income	\$ 4,276	\$ 4,031
Equity in undistributed net income of subsidiaries	(5,075)	(4,768)
Stock based compensation and ESOP expense	630	773
Amortization of deferred financing from subordinated loan	34	35
Net change in other assets and liabilities	(1,256)	(1,372)
Net cash flows from operating activities	(1,391)	(1,301)
Investing Activities		
Capital contributed to wholly-owned bank subsidiary	(5,700)	_
Net cash flows from investing activities	(5,700)	
Financing activities		
Proceeds from exercise of stock options	218	385
Net proceeds from common stock private placement	4,199	_
Net proceeds from preferred stock private placement	15,370	_
Cash dividends paid to common shareholders	(1,091)	(1,025)
Cash dividends paid to preferred shareholders	(139)	_
Cash dividends paid on warrants	(15)	_
Net cash flows from financing activities	18,542	(640)
Change in cash and cash equivalents	11,451	(1,941)
Cash and cash equivalents at beginning of year	3,063	5,004
Cash and cash equivalents at end of year	\$14,514	\$ 3,063

NOTE 24: RELATED PARTY TRANSACTIONS

In the ordinary course of business, the Company has granted loans to certain directors, executive officers and their affiliates (collectively referred to as "related parties"). These loans were made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other unaffiliated parties and do not involve more than normal risk of collectability.

The following represents the activity associated with loans to related parties during the year ended December 31, 2019:

(In thousands)	
Balance at the beginning of the year	\$10,512
Originations and Officer additions	1,685
Principal payments and Officer removals	(3,425)
Balance at the end of the year	\$ 8,772

Deposits of related parties at December 31, 2019 and December 31, 2018 were \$4.5 million and \$3.9 million, respectively.

NOTE 25: CONVERSION AND REORGANIZATION

On October 16, 2014, the former Pathfinder Bancorp ("former Pathfinder") completed the conversion and reorganization pursuant to which Pathfinder Bancorp, MHC converted to the stock holding company form of organization under a "second step" conversion (the "Conversion"), and the Bank reorganized from the two-tier mutual holding company structure to the stock holding company structure. Prior to the completion of the Conversion, the MHC owned approximately 60.4% of the common stock of the Company. The Company, the new stock holding company for Pathfinder Bank, sold 2,636,053 shares of common stock at \$10.00 per share, for gross offering proceeds of \$26.4 million in its stock offering. In addition, \$197,000 in cash was received by the Company from the MHC upon it ceasing to exist.

Concurrent with the completion of the offering, shares of common stock of the Company owned by the public were exchanged for shares of the Company's common stock so that the shareholders now own approximately the same percentage of the Company's common stock as they owned of the former Pathfinder's common stock immediately prior to the Conversion. Shareholders of the former Pathfinder received 1.6472 shares of the Company's common stock for each share of the former Pathfinder's common stock that they owned immediately prior to completion of the transaction. As a result of the offering and the exchange of shares, the Company had 4,353,850 shares outstanding at December 31, 2014. The Company has 4,362,328 and 4,709,238 shares outstanding at December 31, 2018 and December 31, 2019, respectively.

The Conversion was accounted for as a change in corporate form with no resulting change in the historical basis of the Company's assets, liabilities, and equity. Costs related to the offering were primarily marketing fees paid to the Company's investment banking firm, legal and professional fees, registration fees, printing and mailing costs and totaled \$1.5 million. Accordingly, net proceeds were \$24.9 million. In addition, as part of the Conversion and dissolution of the MHC, the Company received \$197,000 of cash previously held by the MHC. As a result of the Conversion and Offering, Pathfinder Bancorp, Inc., a federal corporation, was succeeded by a new fully public Maryland corporation with the same name and the MHC ceased to exist.

The shares of common stock sold in the offering and issued began trading on the NASDAQ Capital Market on October 17, 2014 under the trading symbol "PBHC."

In accordance with Board of Governors of the Federal Reserve System regulations, at the time of the reorganization, the Company substantially restricted retained earnings by establishing a liquidation account. The

liquidation account will be maintained for the benefit of eligible account holders who continue to maintain their accounts at the Bank after conversion. The Bank will establish a parallel liquidation account to support the Company's liquidation account in the event the Company does not have sufficient assets to fund its obligations under its liquidation account. The liquidation accounts will be reduced annually to the extent that eligible account holders have reduced their qualifying deposits. Subsequent increases will not restore an eligible account holder's interest in the liquidation accounts. In the event of a complete liquidation of the Bank or the Company, each account holder will be entitled to receive a distribution in an amount proportionate to the adjusted qualifying account balances then held.

The Bank may not pay dividends if those dividends would reduce equity capital below the required liquidation account amount.

NOTE 26: ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Changes in the components of accumulated other comprehensive income (loss) ("AOCI"), net of tax, for the periods indicated are summarized in the table below.

	For the years ended December 31, 2019						
(In thousands)	Retirement Plans	Unrealized Gains and Losses on Available-for- Sale Securities		Unrealized Loss on Securities Transferred to Held-to- Maturity		Total	
Beginning balance	\$ (3,152)	\$	(2,832)	\$	(58)	\$(6,042)	
Other comprehensive income before reclassifications	188		2,859		20	3,067	
Amounts reclassified from AOCI	247		(243)		_	4	
Ending balance	\$ (2,717)	\$	(216)	\$	(38)	\$(2,971)	
	For the years ended December 31, 2018						
	Retirement	Unrealized Gains and Losses on Available-for-		Unrealized Loss on Securities Transferred to Held-to-			
(In thousands)	Plans	Sale Securities		<u>Maturity</u>		Total	
Beginning balance	\$ (2,220)	\$	(1,558)	\$	(430)	\$(4,208)	
Other comprehensive income before reclassifications	(1,058)		(1,471)		129	(2,400)	
Amounts reclassified from AOCI	126		134		_	260	
Cumulative effect of change in measurement of equity securities (1)	_		(53)		_	(53)	
Cumulative effect of change in investment securities transfer (2)			116		243	359	
Ending balance	\$ (3,152)	\$	(2,832)	\$	(58)	\$(6,042)	

- (1) Cumulative effect of unrealized gain on marketable equity securities based on the adoption of ASU 2016-01 Financial Instruments Overall (Subtopic 825-10): Recognition and Measurement of Financial Assets and Liabilities.
- (2) Cumulative effect of unrealized gains on the transfer of 52 investment securities from held-to-maturity classification to available-for-sale classification based on the adoption of ASU 2017-12: Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities

The following table presents the amounts reclassified out of each component of AOCI for the indicated annual period:

(In thousands)	For the years ended		l		
Details about AOCI¹ components Retirement plan items	December 31, December 31, 2019 2018			Affected Line Item in the Statement of Income	
Retirement plan net losses recognized in plan expenses ²	\$	(335)	\$	(171)	Salaries and employee benefits
		88		45	Provision for income taxes
	\$	(247)	\$	(126)	Net Income
Available-for-sale securities					
Realized gain (loss) on sale of securities					Net gains on sales and redemptions of investment
	\$	329	\$	(182)	securities
		(86)		48	Provision for income taxes
	\$	243	\$	(134)	Net Income

- (1)
- Amounts in parentheses indicates debits in net income. These items are included in net periodic pension cost. (2)

See Note 14 for additional information.

NOTE 27: NONINTEREST INCOME

The Company has included the following table regarding the Company's noninterest income for the periods presented.

	Years Decem	Ended iber 31.
(In thousands)	2019	2018
Service fees		
Insufficient funds fees	\$1,122	\$ 852
Deposit related fees	179	202
ATM fees	90	94
Total service fees	1,391	1,148
Fee Income		
Insurance commissions	828	831
Investment services revenue	267	288
ATM fees surcharge	226	232
Banking house rents collected	<u>195</u>	134
Total fee income	1,516	1,485
Card income		
Debit card interchange fees	657	576
Merchant card fees	80	72
Total card income	737	648
Mortgage fee income and realized gain on sale of loans and foreclosed real estate		
Loan servicing fees	211	170
Net gains on sales of loans and foreclosed real estate	64	50
Total mortgage fee income and realized gain on sale of loans and foreclosed real estate	275	220
Total	3,919	3,501
Earnings and gain on bank owned life insurance	462	427
Net gains (losses) on sales and redemptions of investment securities	329	(182)
Gains (losses) on marketable equity securities	81	(62)
Other miscellaneous income	126	151
Total noninterest income	\$4,917	\$3,835

The following is a discussion of key revenues within the scope of the new revenue guidance:

- Service fees Revenue is earned through insufficient funds fees, customer initiated activities or passage of time for deposit related fees, and ATM service fees. Transaction-based fees are recognized at the time the transaction is executed, which is the same time the Company's performance obligation is satisfied. Account maintenance fees are earned over the course of the month as the monthly maintenance performance obligation to the customer is satisfied.
- *Fee income* Revenue is earned through commissions on insurance and securities sales, ATM surcharge fees, and banking house rents collected. The Company earns investment advisory fee income by providing investment management services to customers under investment management contracts. As the direction of investment management accounts is provided over time, the performance obligation to investment management customers is satisfied over time, and therefore, revenue is recognized over time.
- *Card income* Card income consists of interchange fees from consumer debit card networks and other related services. Interchange rates are set by the card networks. Interchange fees are based on purchase volumes and other factors and are recognized as transactions occur.

• Mortgage fee income and realized gain on sale of loans and foreclosed real estate – Revenue from mortgage fee income and realized gain on sale of loans and foreclosed real estate is earned through the origination of residential and commercial mortgage loans, sales of one-to-four family residential mortgage loans, sales of government guarantees portions of SBA loans, and sales of foreclosed real estate, and is earned as the transaction occurs.

NOTE 28: LEASES

The Company has operating and finance leases for certain banking offices and land under noncancelable agreements. Our leases have remaining lease terms that vary from less than one year up to 31 years, some of which include options to extend the leases for various renewal periods. All options to renew are included in the current lease term when we believe it is reasonably certain that the renewal options will be exercised.

The Company elected to adopt the transition relief under Topic 842, Leases, using the modified retrospective transition method. The periods presented prior to January 1, 2019 continue to be in accordance with ASC 840.

The components of lease expense are as follows:

	For the years ended	
	December 31,	
(In thousands)	2019	
Operating lease cost	\$ 240	
Finance lease cost	\$ 51	

Supplemental cash flow information related to leases was as follows:

(In thousands)	Decer	mber 31,
Cash paid for amount included in the measurement of lease liabilities:		
Operating cash flows from operating leases	\$	215
Operating cash flows from finance leases	\$	51
Financing cash flows from finance leases	\$	46

Supplemental balance sheet information related to leases was as follows:

		December 31,	
(In thousands, except lease term and discount rate)		2019	
Operating Leases:			
Operating lease right-of-use assets	\$	2,386	
Operating lease liabilities	\$	2,650	
Finance Leases:			
Financial Liability	\$	578	
Weighted Average Remaining Lease Term:			
Operating Leases	19.	.58 years	
Finance Leases	29.42 years		
Weighted Average Discount Rate:			
Operating Leases		3.71%	
Finance Leases		13.75%	

Maturities of lease liabilities were as follows:

Years Ending December 31,	
(In thousands)	
2020	\$ 116
2021	99
2022	99
2023	110
2024	118
Thereafter	2,686
Total minimum lease payments	\$3,228

The Company owns certain properties that it leases to unaffiliated third parties at market rates. Lease rental income was \$195,000 and \$134,000 for the twelve months ended December 31, 2019 and 2018, respectively. All lease agreements are accounted for as operating leases. The Company has no unamortized initial direct costs related to the establishment of these lease agreements at January 1, 2019.

NOTE 29: SUBSEQUENT EVENTS

The outbreak of Coronavirus Disease 2019 ("COVID-19") could adversely impact a broad range of industries in which the Company's customers operate and impair their ability to fulfill their financial obligations to the Company. The World Health Organization has declared Covid-19 to be a global pandemic indicating that almost all public commerce and related business activities must be, to varying degrees, curtailed with the goal of decreasing the rate of new infections.

The spread of the outbreak will likely cause significant disruptions in the U.S. economy and is highly likely to disrupt banking and other financial activity in the areas in which the Company operates and could also potentially create widespread business continuity issues for the Company. The Company's business is dependent upon the willingness and ability of its employees and customers to conduct banking and other financial transactions. If the global response to contain COVID-19 escalates or is unsuccessful, the Company could experience a material adverse effect on its business, financial condition, results of operations and cash flows.

The Company's management routinely evaluates the overall characteristics of its loan portfolio. Such evaluations may include analyses of certain loans for potential sales to unaffiliated third parties. Loan sales may be made in response to a variety of factors such as changes in market conditions or changes in the level of certain loan-type concentrations. Such sales, when executed, would typically be made in order to improve certain characteristics within the overall loan portfolio, viewed individually or in combination, related to factors such as cash flow, liquidity, duration or potential interest rate risk.

On January 28, 2020, the Company completed the sale of 267 residential mortgage loans, on a servicing-retained basis, that were categorized as loans held-for-sale as of December 31, 2019. The loans had been previously held in portfolio from two to five years. The loans were acquired by FNMA in a transaction arranged and managed by an independent third party. The sold loans had an aggregate unpaid principal balance of \$35.7 million and a weighted average coupon of 4.08%. Loan sales of this specific type are executed with the intention of reducing the overall duration of the loan portfolio and the Company's potential exposure to the effects of rising interest rates as well as to provide liquidity for other lending activities. As a result of the sale, the Company recognized a pre-tax gain of \$370,000 on the sale and capitalized an additional \$289,000 in retained mortgage servicing rights. In total, therefore, pretax revenue was increased by \$659,000 in January 2020 as a result of this transaction. The proceeds of the sale will be used on an interim basis to improve overall balance sheet liquidity by reducing the Company's aggregate level of borrowed funds and/or brokered certificates of deposit in the remainder of the first quarter of 2020. Ultimately, it is expected that the proceeds of the transaction will be used to fund growth in the Company's commercial and commercial real estate loan portfolios.

On March 23, 2020, the Company announced that its Board of Directors had declared a cash dividend of \$0.06 per common and preferred share, and a cash dividend of \$0.06 per notional share for the issued common stock Warrant. The dividend will be payable on May 8, 2020 to shareholders of record on April 16, 2020.

PART II INFORMATION NOT REQUIRED IN PROSPECTUS

Item 20. Indemnification of Officers and Directors.

Articles 10 and 11 of the Articles of Incorporation of Pathfinder Bancorp, Inc. (the "Corporation") set forth circumstances under which directors, officers, employees and agents of the Corporation may be insured or indemnified against liability which they incur in their capacities as such:

ARTICLE 10. Indemnification, etc. of Directors and Officers.

A. Indemnification. The Corporation shall indemnify (1) its current and former directors and officers, whether serving the Corporation or at its request any other entity, to the fullest extent required or permitted by the MGCL now or hereafter in force, and (2) other employees and agents to such extent as shall be authorized by the Board of Directors and permitted by law; provided, however, that, except as provided in Section B of this Article 10 with respect to proceedings to enforce rights to indemnification, the Corporation shall indemnify any such indemnitee in connection with a proceeding (or part thereof) initiated by such indemnitee only if such proceeding (or part thereof) was authorized by the Board of Directors of the Corporation. The right to indemnification conferred herein shall include the right to be paid by the Corporation the expenses incurred in defending any such proceeding in advance of its final disposition, to the fullest extent permitted by law.

B. Procedure. If a claim under Section A of this Article 10 is not paid in full by the Corporation within sixty (60) days after a written claim has been received by the Corporation, except in the case of a claim for an advancement of expenses, in which case the applicable period shall be twenty (20) days, the indemnitee may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim. If successful in whole or in part in any such suit, or in a suit brought by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the indemnitee shall also be entitled to be reimbursed the expense of prosecuting or defending such suit. It shall be a defense to any action for advancement of expenses that the Corporation has not received both (i) an undertaking as required by law to repay such advances in the event it shall ultimately be determined that the standard of conduct has not been met and (ii) a written affirmation by the indemnitee of his good faith belief that the standard of conduct necessary for indemnification by the Corporation has been met. In (i) any suit brought by the indemnitee to enforce a right to indemnification hereunder (but not in a suit brought by the indemnitee to enforce a right to an advancement of expenses) it shall be a defense that, and (ii) any suit by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking the Corporation shall be entitled to recover such expenses upon a final adjudication that, the indemnitee has not met the applicable standard for indemnification set forth in the MGCL. Neither the failure of the Corporation (including its Board of Directors, independent legal counsel, or its stockholders) to have made a determination prior to the commencement of such suit that indemnification of the indemnitee is proper in the circumstances because the indemnitee has met the applicable standard of conduct set forth in the MGCL, nor an actual determination by the Corporation (including its Board of Directors, independent legal counsel, or its stockholders) that the indemnitee has not met such applicable standard of conduct, shall create a presumption that the indemnitee has not met the applicable standard of conduct or, in the case of such a suit brought by the indemnitee, be a defense to such suit. In any suit brought by the indemnitee to enforce a right to indemnification or to an advancement of expenses hereunder, or by the Corporation to recover an advancement of expenses pursuant to the terms of an undertaking, the burden of proving that the indemnitee is not entitled to be indemnified, or to such advancement of expenses, under this Article 10 or otherwise shall be on the Corporation.

- **C. Non-Exclusivity.** The rights to indemnification and to the advancement of expenses conferred in this Article 10 shall not be exclusive of any other right that any Person may have or hereafter acquire under any statute, these Articles, the Corporation's Bylaws, any agreement, any vote of stockholders or the Board of Directors, or otherwise.
- **D. Insurance.** The Corporation may maintain insurance, at its expense, to insure itself and any director, officer, employee or agent of the Corporation or another corporation, partnership, joint venture, trust or other

enterprise against any expense, liability or loss, whether or not the Corporation would have the power to indemnify such Person against such expense, liability or loss under the MGCL.

E. Miscellaneous. The Corporation shall not be liable for any payment under this Article 10 in connection with a claim made by any indemnitee to the extent such indemnitee has otherwise actually received payment under any insurance policy, agreement, or otherwise, of the amounts otherwise indemnifiable hereunder. The rights to indemnification and to the advancement of expenses conferred in Sections A and B of this Article 10 shall be contract rights and such rights shall continue as to an indemnitee who has ceased to be a director or officer and shall inure to the benefit of the indemnitee's heirs, executors and administrators.

F. Limitations Imposed by Federal Law. Notwithstanding any other provision set forth in this Article 10, in no event shall any payments made by the Corporation pursuant to this Article 10 exceed the amount permissible under applicable federal law, including, without limitation, Section 18(k) of the Federal Deposit Insurance Act and the regulations promulgated thereunder.

Any repeal or modification of this Article 10 shall not in any way diminish any rights to indemnification or advancement of expenses of such director or officer or the obligations of the Corporation arising hereunder with respect to events occurring, or claims made, while this Article 10 is in force.

ARTICLE 11. Limitation of Liability. An officer or director of the Corporation, as such, shall not be liable to the Corporation or its stockholders for money damages, except (A) to the extent that it is proved that the Person actually received an improper benefit or profit in money, property or services, for the amount of the benefit or profit in money, property or services actually received; or (B) to the extent that a judgment or other final adjudication adverse to the Person is entered in a proceeding based on a finding in the proceeding that the Person's action, or failure to act, was the result of active and deliberate dishonesty and was material to the cause of action adjudicated in the proceeding; or (C) to the extent otherwise provided by the MGCL. If the MGCL is amended to further eliminate or limit the personal liability of officers and directors, then the liability of officers and directors of the Corporation shall be eliminated or limited to the fullest extent permitted by the MGCL, as so amended.

Any repeal or modification of the foregoing paragraph by the stockholders of the Corporation shall not adversely affect any right or protection of a director or officer of the Corporation existing at the time of such repeal or modification.

Item 21. Exhibits and Financial Statement Schedules.

(a) Exhibits:

<u>Number</u>	Description
3.1	Articles of Incorporation of Pathfinder Bancorp, Inc. (Incorporated herein by reference to Exhibit 3.1 to Pathfinder Bancorp, Inc.'s
	Registration Statement on Form S-1, file no. 333-196676, originally filed on June 11, 2014)
3.2	Bylaws of Pathfinder Bancorp, Inc. (Incorporated herein by reference to Exhibit 3.2 to Pathfinder Bancorp, Inc.'s Registration Statement on Form S-1, file no. 333-196676, filed on June 11, 2014)
3.3	Articles Supplementary to the Articles of Incorporation of Pathfinder Bancorp, Inc. designating the Company's Series B Convertible Perpetual Preferred Stock, par value \$0.01 per share (Incorporated herein by reference to Exhibit 3.1 to Pathfinder Bancorp, Inc.'s Current Report on Form 8-K, file no. 001-36695, filed on May 9, 2019)
4.1	Form of Stock Certificate of Pathfinder Bancorp, Inc. (Incorporated herein by reference to Exhibit 4 to Pathfinder Bancorp, Inc.'s Registration Statement on Form S-1, file no. 333-196676, filed on June 11, 2014)

Number	Description
4.2	Indenture between Pathfinder Bancorp, Inc., a federal corporation, and Wilmington Trust Company, as trustee, dated March 22, 2007 (Incorporated herein by reference to Exhibit 4.1 to Pathfinder Bancorp, Inc.'s Current Report on Form 8-K, file no. 001-36695, filed on October 22, 2014)
4.3	Supplemental Indenture between Pathfinder Bancorp, Inc. and Wilmington Trust Company, as trustee, dated October 16, 2014 (Incorporated herein by reference to Exhibit 4.2 to Pathfinder Bancorp, Inc.'s Current Report on Form 8-K, file no. 001-36695, filed on October 22, 2014)
4.4	Warrant Agreement, by and between Pathfinder Bancorp, Inc. and Castle Creek Capital Partners VII, L.P., dated May 8, 2019 (Incorporated herein by reference to Exhibit 4.1 to Pathfinder Bancorp, Inc.'s Current Report on Form 8-K, file no. 001-36695, filed on May 9, 2019)
4.5	Indenture, dated as of October 14, 2020, by and between Pathfinder Bancorp, Inc. and UMB Bank, National Association, as trustee (incorporated by reference to Exhibit 4.1 of the Registrant's Current Report on Form 8-K, filed October 15, 2020)
4.6	Form of 5.50% Fixed-to-Floating Rate Subordinated Note due 2030 of Pathfinder Bancorp, Inc. (included in Exhibit 4.5)
5.1	Opinion of Luse Gorman, PC
10.1	2003 Executive Deferred Compensation Plan (Incorporated herein by reference to Exhibit 10.3 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008 file no. 000-23601, filed on March 27, 2009)
10.2	2003 Trustee Deferred Fee Plan (Incorporated herein by reference to Exhibit 10.4 to the Company's Annual Report on Form 10-K for the year ended December 31, 2008 file no. 000-23601, filed on March 27, 2009)
10.3	Employment Agreement between Pathfinder Bank and Thomas W. Schneider, President and Chief Executive Officer (Incorporated by reference to Exhibit 10.5 to Pathfinder Bancorp, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008, file no. 000-23601, filed on March 27, 2009)
10.4	Executive Supplemental Retirement Plan Agreement between Pathfinder Bank and Thomas W. Schneider effective February 24, 2014 (Incorporated by reference to Exhibit 10.13 to Pathfinder Bancorp, Inc.'s Current Report Form 8-K, file no. 000-23601, filed on February 25, 2014)
10.5	Executive Supplemental Retirement Plan Agreement between Pathfinder Bank and James A. Dowd effective February 24, 2014 (Incorporated by reference to Exhibit 10.15 to Pathfinder Bancorp, Inc.'s Current Report Form 8-K, file no. 000-23601, filed on February 25, 2014)
10.6	Amended and Restated Declaration of Trust among Pathfinder Bancorp, Inc., a federal corporation, as Sponsor, Wilmington Trust Company, as Delaware and Institutional Trustee, and the administrative trustees of the Pathfinder Statutory Trust II (Incorporated herein by reference to Exhibit 10.1 to Pathfinder Bancorp, Inc.'s Current Report on Form 8-K, file no. 001-36695, filed on October 22, 2014)
10.7	Amendment two to the Trustee Deferral Fee Plan (Incorporated by reference to Exhibit 10.17 to Pathfinder Bancorp, Inc.'s Annual Report on Form 10-K, file no. 001-36695, filed on March 18, 2015)
10.8	Amendment one to the Executive Deferral Compensation Plan (Incorporated by reference to Exhibit 10.18 to Pathfinder Bancorp, Inc.'s Annual Report on Form 10-K, file no. 001-36695, filed on March 18, 2015)
10.9	Amendment one to the Supplemental Executive Retirement Plan (Incorporated by reference to Exhibit 10.19 to Pathfinder Bancorp, Inc.'s Annual Report on Form 10-K, file no. 001-36695, filed on March 18, 2015)

Number	Description
10.10	Subordinated Loan Agreement (Incorporated herein by reference to Pathfinder Bancorp, Inc.'s Current Report on Form 8-K, file no. 001-36695, filed on October 19, 2015)
10.11	2016 Pathfinder Bancorp, Inc. Equity Incentive Plan (Incorporated by reference to Appendix A to Pathfinder Bancorp, Inc.'s Proxy Statement, file no. 001-36695, filed on March 29, 2016.
10.12	Executive Supplemental Retirement Plan Agreement between Pathfinder Bank and Ronald Tascarella effective February 24, 2014 (Incorporated by reference to Exhibit 10.14 to Pathfinder Bancorp, Inc.'s Annual Report on Form 10-K, file no. 001-36695, filed on March 30, 2018).
10.13	Senior Executive Split Dollar Life Insurance Plan (Incorporated by reference to Exhibit 10.1 to Pathfinder Bancorp, Inc.'s Current Report on Form 8-K, filed no. 001-36695, filed on January 7, 2019.
10.14	Change of Control Agreement between Pathfinder Bank and James A. Dowd (Incorporated by reference to Exhibit 10.2 to Pathfinder Bancorp, Inc.'s Current Report on Form 8-K, filed no. 001-36695, filed on January 7, 2019.
10.15	Change of Control Agreement between Pathfinder Bank and Ronald Tascarella (Incorporated by reference to Exhibit 10.3 to Pathfinder Bancorp, Inc.'s Current Report on Form 8-K, filed no. 001-36695, filed on January 7, 2019.
10.16	Securities Purchase Agreement, by and between Pathfinder Bancorp, Inc. and the Purchasers Identified on the Signature Pages Thereto, dated May 8, 2019 (Incorporated herein by reference to Exhibit 10.1 to Pathfinder Bancorp, Inc.'s Current Report on Form 8-K, file no. 001-36695, filed on May 9, 2019)
10.17	Registration Rights Agreement, by and between Pathfinder Bancorp, Inc. and Castle Creek Capital Partners VII, L.P., dated May 8, 2019 (Incorporated herein by reference to Exhibit 10.2 to Pathfinder Bancorp, Inc.'s Current Report on Form 8-K, file no. 001-36695, filed on May 9, 2019)
10.18	Form of Subordinated Note Purchase Agreement, dated as of October 14, 2020, by and between Pathfinder Bancorp, Inc. and the several Purchasers (incorporated by reference to Exhibit 10.1 of the Registrant's Current Report on Form 8-K, filed October 15, 2020)
10.19	Form of Registration Rights Agreement, dated as of October 14, 2020, by and between Pathfinder Bancorp, Inc. and the several Purchasers (incorporated by reference to Exhibit 10.2 of the Registrant's Current Report on Form 8-K, filed October 15, 2020).
21	Subsidiaries of Registrant (incorporated by reference to Exhibit 21 of the Registrant's Annual Report on Form10-K filed March 23, 2020).
23.1	Consent of Bonadio & Co., LLP
23.2	Consent of Luse Gorman, PC (included in Exhibit 5.1)
24.1	Power of Attorney (included on the signature page to this registration statement)
25.1	Form T-1 Statement of Eligibility under the Trust Indenture Act of 1939, as amended, of UMB Bank, N.A., with respect to the Indenture, dated as of October 14, 2020, between Pathfinder Bancorp, Inc. and UMB Bank, N.A., as trustee, relating to the 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030
99.1	Form of Letter of Transmittal relating to the 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030

(b) Financial Statement Schedules:

All schedules for which provision is made in the applicable accounting regulations of the Securities and Exchange Commission have been omitted because they are not required, amounts which would otherwise be

required to be shown with respect to any item are not material, are inapplicable or the required information has already been provided elsewhere or incorporated by reference in the registration statement.

Item 22. Undertakings.

- (a) The undersigned registrant hereby undertakes:
 - (1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:
 - (i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;
 - (ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and
 - (iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement.
- (2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.
- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided*, *however*, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such first use, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such date of first use.
- (5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:
 - (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424:

- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
 - (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser.
- (b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in this registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.
- (d) The undersigned registrant hereby undertakes to respond to requests for information that is incorporated by reference into the prospectus pursuant to Items 4, 10(b), 11 or 13 of this Form, within one (1) business day of receipt of such request, and to send the incorporated documents by first class mail or other equally prompt means. This includes information contained in documents filed subsequent to the effective date of the registration statement through the date of responding to the request.
- (e) The undersigned registrant hereby undertakes to supply by means of a post-effective amendment all information concerning a transaction, and the company being acquired involved therein, that was not the subject of and included in this registration statement when it became effective.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Oswego, State of New York, on this 30th day of October, 2020.

PATHFINDER BANCORP, INC.

By: /s/ Thomas W. Schneider
Thomas W. Schneider
President and Chief Executive Officer

POWER OF ATTORNEY

Each person whose signature appears below appoints Thomas W. Schneider and Walter F. Rusnak, and each of them, either of whom may act without the joinder of the other, as his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement and any registration statement (including any amendment thereto) for this offering that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and to file the same, with all exhibits thereto, and all other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as he or she might or would do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his or her substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed below by the following persons in the capacities indicated on October 30, 2020.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
/s/ Thomas W. Schneider Thomas W. Schneider	President and Chief Executive Officer/Director (Principal Executive Officer)	October 30, 2020
/s/ Walter F. Rusnak Walter F. Rusnak	Senior Vice President and Chief Financial Officer (Principal Financial Officer)	October 30, 2020
/s/ Lisa A. Kimball Lisa A. Kimball	Vice President and Controller (Principal Accounting Officer)	October 30, 2020
/s/ Lloyd Stemple Lloyd Stemple	Director	October 30, 2020
/s/ John P. Funiciello John P. Funiciello	Director	October 30, 2020
/s/ William A. Barclay William A. Barclay	Director	October 30, 2020
/s/ David A. Ayoub David A. Ayoub	Director	October 30, 2020

/s/ Chris R. Burritt Chris R. Burritt	Director	October 30, 2020
/s/ George P. Joyce George P. Joyce	_ Director	October 30, 2020
/s/ John F. Sharkey John F. Sharkey	Director	October 30, 2020
/s/ Adam C. Gagas Adam C. Gagas	Director	October 30, 2020
/s/ Melanie Littlejohn Melanie Littlejohn	Director	October 30, 2020

LUSE GORMAN, PC

ATTORNEYS AT LAW 5335 WISCONSIN AVENUE, N.W., SUITE 780 WASHINGTON, D.C. 20015

> TELEPHONE (202) 274-2000 FACSIMILE (202) 362-2902 www.luselaw.com

October 30, 2020

The Board of Directors Pathfinder Bancorp, Inc. 214 West First Street Oswego, NY 13126

Ladies and Gentlemen:

We have acted as special counsel to Pathfinder Bancorp, Inc., a Maryland corporation (the "Company"), in connection with the Company's proposed offer to exchange, pursuant to a registration statement on Form S-4 (the "Registration Statement") filed with the Securities and Exchange Commission under the Securities Act of 1933, as amended (the "Securities Act"), up to \$25,000,000 in aggregate principal amount of the Company's 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030 (the "Exchange Notes") for the Company's outstanding 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030 originally issued on October 14, 2020 (the "Initial Notes"), as contemplated by the Registration Rights Agreements, dated as of October 14, 2020, by and between the Company and the various purchasers of the Initial Notes. The Exchange Notes will be issued under the indenture dated as of October 14, 2020 (the "Indenture"), by and between the Company and UMB Bank, National Association, as trustee (the "Trustee").

In connection with rendering the opinion set forth below, we have examined the originals or copies of the Registration Statement, board resolutions, and such other records of the Company and other documents as we have deemed relevant and necessary as the basis for the opinions set forth below. In addition, we have examined and relied on certificates of public officials and, as to certain matters of fact that are material to our opinion, certificates from officers of the Company. We have not independently established any of the facts upon which we have so relied. In our examination, we have assumed the genuineness of all signatures, the legal capacity and competency of all natural persons, the authenticity of all documents submitted to us as originals and the conformity to original documents of all documents submitted to us as copies. With respect to parties other than the Company and its subsidiaries, we have further assumed the due authorization of such documents by all parties, the due execution and delivery of such documents by each party, and have additionally assumed that all agreements are the valid and binding agreements of all parties to such agreements. We also have made such examination of law as we have deemed appropriate.

Based upon and subject to the foregoing, it is our opinion that when the Exchange Notes have been duly executed by the Company and authenticated by the Trustee in accordance with the terms of the Indenture, and duly issued and delivered by the Company in exchange for an equal principal amount of Initial Notes, the Exchange Notes will be legally valid and binding obligations of the Company, entitled to the benefits of the Indenture and enforceable against the Company in accordance with their terms.

The foregoing opinion is limited to the General Corporation Law of the State of Maryland and the laws of the State of New York (as it relates to the enforceability of documents, agreements and instruments referred to herein) as of the date hereof, and we are expressing no opinion as to the effect of the laws of any other jurisdiction or as of any later date. We are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to advise you of any change in any of these sources of law or subsequent legal or factual developments that might affect any matter or opinion set forth herein. This opinion is subject to bankruptcy, insolvency, reorganization, fraudulent transfer, moratorium or other similar laws of general application affecting the rights and remedies of creditors and to general principles of equity.

We hereby consent to the filing of this opinion letter as an exhibit to the Registration Statement and to the reference to us in the related Prospectus under the caption "Legal Matters." In giving our consent, we do not thereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations thereunder.

Sincerely,

/s/ Luse Gorman, PC

Luse Gorman, PC

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We hereby consent to the incorporation by reference in this Registration Statement on Form S-4 of Pathfinder Bancorp, Inc. and subsidiaries of our report dated March 23, 2020 relating to the consolidated financial statements, which appears in Pathfinder Bancorp, Inc. and subsidiaries' Annual Report on Form 10-K for the year ended December 31, 2019. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ Bonadio & Co., LLP Pittsford, New York October 30, 2020

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM T-1

STATEMENT OF ELIGIBILITY
UNDER THE TRUST INDENTURE ACT OF 1939
OF A CORPORATION DESIGNATED TO ACT AS TRUSTEE

Check if an Application to Determine Eligibility of a Trustee Pursuant to Section 305(b)(2)

UMB BANK, NATIONAL ASSOCIATION

(Exact name of Trustee as specified in its charter)

44-0201230
I.R.S. Employer Identification No.

1010 Grand Blvd. Kansas City, Missouri (Address of principal executive offices)

64106 (Zip Code)

Mauri J. Cowen
UMB BANK, NATIONAL ASSOCIATION
5555 San Felipe, Suite 870
Houston, Texas 77056
(713) 300-0586
(Name, address and telephone number of agent for service)

PATHFINDER BANCORP, INC. (Issuer with respect to the Securities)

Maryland (State or other jurisdiction of incorporation or organization)

38-3941859 (I.R.S. Employer Identification No.)

214 West First Street
Oswego, New York
(Address of Principal Executive Offices)

13126 (Zip Code)

5.50% Fixed-to-Floating Rate Subordinated Notes due 2030

(Title of the Indenture Securities)

FORM T-1

Item 1. GENERAL INFORMATION. Furnish the following information as to the Trustee.

n) Name and address of each examining or supervising authority to which it is subject.

The Comptroller of the Currency Mid-Western District 2345 Grand Avenue, Suite 700 Kansas City, Missouri 64108

Federal Reserve Bank of Kansas City Federal Reserve P.O. Station Kansas City, Missouri 64198

Supervising Examiner Federal Deposit Insurance Corporation 720 Olive Street, Suite 2909 St. Louis, Missouri 63101

b) Whether it is authorized to exercise corporate trust powers.
Yes

Item 2. AFFILIATIONS WITH OBLIGOR. *If the obligor is an affiliate of the Trustee, describe each such affiliation.* None

Items 3-15 Items 3-15 are not applicable because, to the best of the Trustee's knowledge, the obligor is not in default under any Indenture for which the Trustee acts as Trustee.

- **Item 16.** LIST OF EXHIBITS: List below all exhibits filed as a part of this statement of eligibility and qualification.
 - 1. A copy of the Articles of Association of the Trustee (Exhibit 1 to Form T-1 filed with Registration Statement No. 333-74008).
 - 2. Certificate of Authority from the Comptroller of the Currency evidencing a change of the corporate title of the Association (Exhibit 2 to Form T-1 filed with Registration Statement No. 333-74008).
 - 3. Certificate from the Comptroller of the Currency evidencing authority to exercise corporate trust powers and a letter evidencing a change of the corporate title of the Association (Exhibit 3 to Form T-1 filed with Registration Statement No. 333-74008).
 - 4. Bylaws, as amended of the Trustee (Exhibit 4 to Form T-1 filed with Registration Statement No. 333-74008).

- 5. A copy of each Indenture referred to in Item 4. Not applicable.
- 6. The consent of the Trustee required by Section 321(b) of the Act (Exhibit 6 to Registration Statement No. 333-74008).
- 7. Report of Condition of the Trustee as of June 30, 2020 published pursuant to law or the requirements of its supervising or examining authority, attached as Exhibit 7.

SIGNATURE

Pursuant to the requirements of the Trust Indenture Act of 1939, as amended, the Trustee, UMB BANK, NATIONAL ASSOCIATION, a national banking association organized and existing under the laws of the United States of America, has duly caused this statement of eligibility and qualification to be signed on its behalf by the undersigned, thereunto duly authorized, all in the city of Houston, State of Texas on the 29th day of October, 2020.

By: /s/ Mauri J. Cowen
Mauri J. Cowen
Sr. Vice President

Exhibit 7

(See Attached)

FFIEC 041 Page 17 of 86 RC-1

Consolidated Report of Condition for Insured Banks and Savings Associations for June 30, 2020

All schedules are to be reported in thousands of dollars. Unless otherwise indicated, report the amount outstanding as of the last business day of the quarter.

Schedule RC—Balance Sheet

					,
	Dollar Amounts	in Thousands	RCON	Amount	
Assets					
1. Cash and balances due from depository institutions (from Schedule RC-A):			0004	100 110	1 .
a. Noninterest-bearing balances and currency and coin (1)			0081	463,446	1.a.
b. Interest-bearing balances (2)			0071	1,820,361	1.b.
2. Securities:			****		
a. Held-to-maturity securities (from Schedule RC-B, column A) (3)			JJ34	1,111,625	2.a.
b. Available-for-sale securities (from Schedule RC-B, column D)			1773	8,483,550	2.b.
c. Equity securities with readily determinable fair values not held for trading (4)			JA22	119	2.c.
3. Federal funds sold and securities purchased under agreements to resell:			700-		
a. Federal funds sold			B987	0	3.a.
b. Securities purchased under agreements to resell (5,6)			B989	1,347,643	3.b.
4. Loans and lease financing receivables (from Schedule RC-C):					
a. Loans and leases held for sale		T .= 00 . 0=0	5369	8,213	4.a.
b. Loans and leases held for investment	B528	15,304,059			4.b.
c. LESS: Allowance for loan and lease losses (7)	3123	200,300			4.c.
d. Loans and leases held for investment, net of allowance (item 4.b minus 4.c)			B529	15,103,759	4.d.
5. Trading assets (from Schedule RC-D)			3545	46,640	5.
6. Premises and fixed assets (including capitalized leases)			2145	226,696	6.
7. Other real estate owned (from Schedule RC-M)			2150	5,710	7.
8. Investments in unconsolidated subsidiaries and associated companies			2130	0	8.
9. Direct and indirect investments in real estate ventures			3656	0	9.
10. Intangible assets (from Schedule RC-M)			2143	128,545	10.
11. Other assets (from Schedule RC-F) (6)			2160	927,592	11.
12. Total assets (sum of items 1 through 11)			2170	29,673,899	12.
Liabilities					
13. Deposits:					4.5
a. In domestic offices (sum of totals of columns A and C from Schedule RC-E)		1	2200	24,590,840	13.a.
(1) Noninterest-bearing (8)	6631	8,765,062			13.a.1.
(2) Interest-bearing	6636	15,825,778			13.a.2.
b. Not applicable					
14. Federal funds purchased and securities sold under agreements to repurchase:			7000	2.1-0-	4.4
a. Federal funds purchased (9)			B993	34,587	14.a.
b. Securities sold under agreements to repurchase (10)			B995	1,929,107	14.b.
15. Trading liabilities (from Schedule RC-D)			3548	0	15.
16. Other borrowed money (includes mortgage indebtedness) (from Schedule RC-M)		3190	0	16.
17. and 18. Not applicable			2200		10
19. Subordinated notes and debentures (11)			3200	0	19.

¹ Includes cash items in process of collection and unposted debits.

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² Includes time certificates of deposit not held for trading.

³ Institutions that have adopted ASU 2016-13 should report in item 2.a amounts net of any applicable allowance for credit losses, and item 2.a should equal Schedule RC-B, item 8, column A, less Schedule RI-B, Part II, item 7, column B.

⁴ Item 2.c is to be completed only by institutions that have adopted ASU 2016-01, which includes provisions governing the accounting for investments in equity securities. See the instructions for further detail on ASU 2016-01.

⁵ Includes all securities resale agreements, regardless of maturity.

⁶ Institutions that have adopted ASU 2016-13 should report in items 3.b and 11 amounts net of any applicable allowance for credit losses.

⁷ Institutions that have adopted ASU 2016-13 should report in item 4.c the allowance for credit losses on loans and leases.

⁸ Includes noninterest-bearing, demand, time, and savings deposits.

⁹ Report overnight Federal Home Loan Bank advances in Schedule RC, item 16, "Other borrowed money."

¹⁰ Includes all securities repurchase agreements, regardless of maturity.

¹¹ Includes limited-life preferred stock and related surplus.

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Schedule RC—Continued

Dollar Amounts in Tho	ousands RCO	N Amount	
Liabilities—continued			
20. Other liabilities (from Schedule RC-G)	293	550,993	20.
21. Total liabilities (sum of items 13 through 20)	294	3 27,105,527	21.
22. Not applicable		-	
Equity Capital			
Bank Equity Capital			
23. Perpetual preferred stock and related surplus	383	3 0	23.
24. Common stock	323	21,250	24.
25. Surplus (excludes all surplus related to preferred stock)	383	749,822	25.
26. a. Retained earnings	363	2 1,501,121	26.a.
b. Accumulated other comprehensive income (1)	B53	296,179	26.b.
c. Other equity capital components (2)	A13	0 0	26.c.
27. a. Total bank equity capital (sum of items 23 through 26.c)	321	2,568,372	27.a.
b. Noncontrolling (minority) interests in consolidated subsidiaries	300	0 0	27.b.
28. Total equity capital (sum of items 27.a and 27.b)	G10	5 2,568,372	28.
29. Total liabilities and equity capital (sum of items 21 and 28)	330	29,673,899	29.

Memoranda

To be reported with the March Report of Condition.

1. Indicate in the box at the right the number of the statement below that best describes the most comprehensive level of auditing work performed for the bank by independent external auditors as of any date during 2019

RCON	Number	
6724	NR	N

M.1.

- 1a = An integrated audit of the reporting institution's financial statements and its internal control over financial reporting conducted in accordance with the standards of the American Institute of Certified Public Accountants (AICPA) or the Public Company Accounting Oversight Board (PCAOB) by an independent public accountant that submits a report on the institution
- 1b = An audit of the reporting institution's financial statements only conducted in accordance with the auditing standards of the AICPA or the PCAOB by an independent public accountant that submits a report on the institution
- 2a = An integrated audit of the reporting institution's parent holding company's consolidated financial statements and its internal con- trol over financial reporting conducted in accordance with the standards of the AICPA or the PCAOB by an independent public accountant that submits a report on the consolidated holding company (but not on the institution separately)
- 2b = An audit of the reporting institution's parent holding com- pany's consolidated financial statements only conducted in accordance with the auditing standards of the AICPA or the PCAOB by an independent public accountant that submits a report on the consolidated holding company (but not on the institution separately)

- 3 = This number is not to be used
- 4 = Directors' examination of the bank conducted in accordance with generally accepted auditing standards by a certified public accounting firm (may be required by statechartering authority)
- 5 = Directors' examination of the bank performed by other external auditors (may be required by state-chartering authority)
- 6 = Review of the bank's financial statements by external auditors
- 7 = Compilation of the bank's financial statements by external auditors
- 8 = Other audit procedures (excluding tax preparation work)
- 9 = No external audit work

To be reported with the March Report of Condition.

2. Bank's fiscal year-end date (report the date in MMDD format)

RCON	Date	
8678	NR	M.2

1 Includes, but is not limited to, net unrealized holding gains (losses) on available-for-sale securities, accumulated net gains (losses) on cash flow

hedges, and accumulated defined benefit pension and other postretirement plan adjustments.

2 Includes treasury stock and unearned Employee Stock Ownership Plan shares.

Reporting Period: June 30, 2020 July 30, 2020 2:38 PM

LETTER OF TRANSMITTAL

to Tender for Exchange

5.50% Fixed-to-Floating Rate Subordinated Notes due 2030

of

PATHFINDER BANCORP, INC.

Pursuant to the Prospectus Dated ______, 2020

THE EXCHANGE OFFER DESCRIBED HEREIN WILL EXPIRE AT 5:00 P.M., EASTERN TIME, ON _______, 2020, UNLESS EXTENDED (THE "EXPIRATION DATE"). TENDERS MAY BE WITHDRAWN PRIOR TO 5:00 P.M., EASTERN TIME, ON THE EXPIRATION DATE.

The Exchange Agent for the Exchange Offer is:

UMB BANK, N.A.

Deliver to:

By Hand, Overnight Delivery or Mail (Registered or Certified Mail Recommended): UMB Bank, N.A. 5555 San Felipe St., Suite 870 Houston, TX 77056 Attn.: Corporate Trust Officer/Mauri J. Cowen By Facsimile Transmission (for eligible institutions only):

(214) 389-5949 Attn: Corporate Trust Officer/Mauri J. Cowen

For any questions regarding this letter of transmittal or for any additional information, you may contact the Exchange Agent by calling (713) 300-0587 or emailing Mauri.Cowen@umb.com.

The undersigned hereby acknowledges receipt of the prospectus, dated _______, 2020 (as it may be amended or supplemented from time to time, the "**Prospectus**"), of Pathfinder Bancorp, Inc., a Maryland corporation (the "**Company**"), which, together with this letter of transmittal, constitute the Company's offer to exchange (the "**Exchange Offer**") up to \$25,000,000 aggregate principal amount of its new 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030 (CUSIP No.: ______) (the "**New Notes**"), which have been registered under the Securities Act of 1933, as amended (the "**Securities Act**"), for any and all of its outstanding unregistered 5.50% Fixed-to-Floating Rate Subordinated Notes due 2030 (CUSIP Nos.: 70319R AB5 and 70319R AA7) (the "**Old Notes**"). Old Notes may be tendered only in minimum denominations of \$100,000 and any integral multiple of \$1,000 in excess thereof.

PLEASE READ THE INSTRUCTIONS SET FORTH BELOW CAREFULLY BEFORE COMPLETING THIS LETTER OF TRANSMITTAL.

Tender of the Old Notes is to be made by book-entry transfer to the exchange agent's account at the Depository Trust Company ("DTC"), by executing the tender through the DTC's "Automated Tender Offer Program" ("ATOP"). DTC participants that are tendering Old Notes pursuant to an Exchange Offer must transmit their acceptance through ATOP to DTC, which will edit and verify the acceptance and send a computer generated message known as an "agent's message" to the exchange agent for its acceptance. Accordingly, this letter of transmittal need not be completed by holders tendering through ATOP. However, each holder will be bound by the terms of this letter of transmittal and the terms of the Exchange Offer, as described in the

Prospectus and this letter of transmittal, and will be deemed to have made the acknowledgements and the representations and warranties contained in this letter of transmittal. Delivery by a holder of documents to DTC or the Company does not constitute valid delivery to the exchange agent.

There is no procedure for guaranteed late delivery of the Old Notes in connection with the Exchange Offer.

The Exchange Offer is not being directed to, nor will tenders be accepted from or on behalf of, holders of Old Notes in any jurisdiction in which the making or acceptance of the Exchange Offer would not be in compliance with the laws of such jurisdiction.

PLEASE READ THE ACCOMPANYING INSTRUCTIONS CAREFULLY

Ladies and Gentlemen:

Upon the terms and subject to the conditions of the Exchange Offer, the undersigned hereby tenders to the Company the principal amount of Old Notes credited by the undersigned to the exchange agent's account at DTC using ATOP. Subject to, and effective upon, the acceptance for exchange of the Old Notes tendered herewith, the undersigned hereby sells, assigns and transfers to, or upon the order of, the Company all right, title and interest in and to such Old Notes.

The undersigned hereby irrevocably constitutes and appoints the exchange agent as its true and lawful agent and attorney-in-fact (with full knowledge that the exchange agent also acts as the agent of the Company and as trustee under the indenture relating to the Old Notes) with respect to such Old Notes tendered herewith, with full power of substitution and resubstitution (such power of attorney being deemed to be an irrevocable power coupled with an interest), subject only to the withdrawal rights described in the Prospectus, to (1) deliver certificates representing such Old Notes tendered herewith, or transfer ownership of such Old Notes, on the account books maintained by DTC, and to deliver all accompanying evidence of transfer and authenticity to, or upon the order of, the Company upon receipt by the exchange agent, as the undersigned's agent, of the New Notes to which the undersigned is entitled upon the acceptance by the Company of such Old Notes for exchange pursuant to the Exchange Offer, (2) receive for the account of the Company all benefits and otherwise exercise all rights of beneficial ownership of such Old Notes tendered herewith, all in accordance with the terms and conditions of the Exchange Offer, and (3) present such Old Notes tendered herewith for transfer, and transfer such Old Notes, on the relevant security register or account books.

The undersigned hereby represents and warrants that the undersigned (1) owns the Old Notes tendered and is entitled to tender such Old Notes, and (2) has full power and authority to tender, sell, exchange, assign and transfer the Old Notes and to acquire New Notes issuable upon the exchange of such Old Notes tendered herewith, and that, when the same are accepted for exchange, the Company will acquire good, marketable and unencumbered title to the Old Notes tendered herewith, free and clear of all security interests, liens, restrictions, charges, encumbrances, conditional sale agreements or other obligations relating to their sale and transfer and not subject to any adverse claim, right, restriction or proxy of any kind.

The undersigned also warrants that it will, upon request, execute and deliver any additional documents deemed by the exchange agent or the Company to be necessary or desirable to complete the sale, exchange, assignment and transfer of Old Notes tendered herewith or to transfer ownership of such notes on the relevant security register or account books maintained by DTC. The undersigned expressly agrees to all of the terms of the Exchange Offer, as described in the Prospectus and this letter of transmittal.

Tenders of the Old Notes pursuant to the procedures described in the Prospectus under the caption "The Exchange Offer—Procedures for Tendering Old Notes" and in the instructions to this letter of transmittal will, upon the Company's acceptance of the Old Notes tendered herewith for exchange, constitute a binding

agreement between the undersigned and the Company in accordance with the terms and subject to the conditions of the Exchange Offer. For purposes of the Exchange Offer, the Company shall be deemed to have accepted validly tendered Old Notes when and if the Company has given oral or written notice to the exchange agent of its acceptance of such Old Notes.

The Exchange Offer is subject to the conditions set forth in the Prospectus under the caption "The Exchange Offer—Conditions." As a result of these conditions (which may be waived, in whole or in part, by the Company in its absolute discretion) as more particularly set forth in the Prospectus, the Company may not be required to exchange any of the Old Notes tendered herewith and, in such event, the Old Notes not exchanged will be returned to the undersigned after the expiration or termination of the Exchange Offer.

The undersigned hereby represents and warrants that:

- (1) the undersigned (or any beneficial owner of the Old Notes) is acquiring the New Notes in the ordinary course of business of the undersigned (or such other beneficial owner);
- (2) neither the undersigned nor any beneficial owner is engaged in, intends to engage in or has any arrangement or understanding with any person to engage or participate in, a distribution of the New Notes within the meaning of federal securities laws, rules and regulations;
- (3) neither the undersigned nor any beneficial owner has any arrangement or understanding with any person or entity to participate in a distribution of the New Notes;
- (4) neither the undersigned nor any beneficial owner is an "affiliate," as such term is defined in Rule 405 promulgated under the Securities Act, of the Company. Upon request by the Company, the undersigned or such beneficial owner will deliver to the Company a legal opinion confirming it is not such an affiliate;
- (5) the undersigned and each beneficial owner acknowledges and agrees that any person that is a broker-dealer registered under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), or is participating in an Exchange Offer for the purpose of distributing any New Notes, must comply with the registration and delivery requirements of the Securities Act in connection with a secondary resale transaction of any New Notes or interests therein acquired by such person and cannot rely on the position of the staff of the U.S. Securities and Exchange Commission (the "SEC") set forth in certain "no-action" letters pursuant to which the Exchange Offer is being conducted;
- (6) neither the undersigned nor any beneficial owner is a broker-dealer holding Old Notes for its own account that were not acquired as a result of market-making or other trading activities (a "participating broker-dealer");
- (7) a secondary resale transaction described in clause (5) above and any resales of New Notes or interests therein obtained by such holder in exchange for Old Notes or interests therein originally acquired by such holder directly from the Company should be covered by an effective registration statement containing the selling security holder information required by Item 507 or Item 508, as applicable, of Regulation S-K under the Securities Act or the SEC; and
- (8) the undersigned is not acting on behalf of any person or entity who could not truthfully make the foregoing representations.

If the undersigned is not a broker-dealer, the undersigned additionally represents that it is not engaged in, does not intend to engage in and has no arrangement or understanding with any person to engage in, a distribution of New Notes.

If the undersigned is a broker-dealer that will receive New Notes for its own account in exchange for Old Notes, it additionally represents that the Old Notes to be exchanged for New Notes were acquired by it as a result of market-making activities or other trading activities and acknowledges that it will deliver a prospectus meeting the requirements of the Securities Act in connection with any resale of such New Notes pursuant to the Exchange

Offer and satisfy any applicable prospectus delivery requirements; however, by so acknowledging and by delivering a prospectus, the undersigned will not be deemed to admit that it is an "underwriter" within the meaning of the Securities Act. If the undersigned is a participating broker-dealer, it may not exchange Old Notes pursuant to the Exchange Offer.

The undersigned acknowledges that the Exchange Offer is being conducted in reliance on interpretations of the Securities Act by the staff of the SEC, as set forth in "no-action" letters issued to third parties, that the New Notes issued pursuant to the Exchange Offer in exchange for the Old Notes may be offered for resale, resold and otherwise transferred by holders thereof (other than any such holder that is an "affiliate" of the Company within the meaning of Rule 405 under the Securities Act), without compliance with the registration and prospectus delivery provisions of the Securities Act, provided that such New Notes are acquired in the ordinary course of such holders' business and such holders are not engaged in and do not intend to engage in and have no arrangement or understanding with the Company or any other person to participate in the distribution (within the meaning of the Securities Act) of such New Notes.

Any holder who is an affiliate of the Company, who does not acquire the New Notes in the ordinary course of business, who participates in or intends to participate in the Exchange Offer for the purpose of, or with a view to, distributing the New Notes or is a broker-dealer registered under the Exchange Act who purchased the Old Notes directly from the Company (1) will not be able to rely on the interpretations of the staff of the SEC set forth in the above-mentioned "no-action" letters, (2) will not be able to tender its Old Notes in the Exchange Offer and (3) must comply with the registration and prospectus delivery requirements of the Securities Act in order to resell the New Notes, and be identified as an underwriter in the Prospectus. The undersigned acknowledges that the Company has not sought or received its own "no-action" letter from the staff of the SEC with respect to the Exchange Offer and the related transactions, and that there can be no assurance that the staff of the SEC will make a determination in the case of the Exchange Offer and such transactions that is similar to its determinations in the above-mentioned "no-action" letters. The undersigned further acknowledges that the Company may rely upon each of the representations and covenants in this letter of transmittal for purposes of the Exchange Offer.

All authority conferred or agreed to be conferred in this letter of transmittal shall not be affected by, and shall survive the death, bankruptcy or incapacity of the undersigned and every obligation of the undersigned hereunder shall be binding upon the heirs, personal representatives, executors, administrators, successors, assigns, trustees in bankruptcy and other legal representatives of the undersigned.

Tendered Old Notes may be withdrawn at any time prior to 5:00 p.m., Eastern time on _______, 2020, or such later date or time to which the Company may extend the Exchange Offer.

New Notes and Old Notes not tendered or accepted for exchange will be issued in the name of the undersigned. Similarly, New Notes and Old Notes not tendered or accepted for exchange will be delivered, without expense, to the undersigned's account at DTC or such other account as designated herein, pursuant to the book-entry transfer procedures described in the Prospectus, after the expiration or termination of the Exchange Offer.

The terms of the New Notes are identical in all material respects to the terms of the Old Notes, except that the New Notes are registered with the SEC under the Securities Act and, as a result, will not bear any legend restricting their transfer; bear a different CUSIP number from the Old Notes; are generally not subject to transfer restrictions, are not entitled to registration rights under the registration rights agreements that the Company entered into with the initial purchasers of the Old Notes or otherwise; and, because holders of the New Notes are not entitled to registration rights, holders of the New Notes do not have the right to additional interest under the circumstances described in that registration rights agreement relating to the Company's fulfillment of its registration obligations. Interest on each New Note will accrue from the last interest payment date on which interest was paid on the Old Note surrendered in exchange thereof, or, if no interest has been paid on such Old Notes, from the date of its original issuance. Interest on the Old Notes accepted for exchange will cease to accrue upon the issuance of the New Notes. Old Notes that are not accepted for exchange in the exchange offer will remain outstanding and interest on those Old Notes will continue to accrue at the applicable interest rate.

The undersigned understands that tenders of Old Notes pursuant to the procedures described under the caption "The Exchange Offer—Procedures for Tendering Old Notes" in the Prospectus and in the instructions to this letter of transmittal will constitute a binding agreement between the undersigned and the Company upon the terms and subject to the conditions of the Exchange Offer, subject only to withdrawal of such tenders on the terms set forth in the Prospectus under the caption "The Exchange Offer—Withdrawal of Tenders."

By crediting the Old Notes to the exchange agent's account at DTC using ATOP and by complying with applicable ATOP procedures with respect to the Exchange Offer, the DTC participant confirms and agrees to be bound by, on behalf of itself and the beneficial owners of such Old Notes, all provisions of this letter of transmittal (including all acknowledgements, representations and warranties contained herein) applicable to it and such beneficial owner as fully as if it had completed the information required herein and executed and transmitted this letter of transmittal to the exchange agent.

INSTRUCTIONS TO LETTER OF TRANSMITTAL FORMING PART OF THE TERMS AND CONDITIONS OF THE EXCHANGE OFFER

1. <u>BOOK-ENTRY CONFIRMATIONS</u>. For a holder to properly tender Old Notes in book-entry form pursuant to the Exchange Offer and to obtain New Notes, (1) the exchange agent must receive a properly transmitted "agent's message" (as defined in the Prospectus under "The Exchange Offer-Procedures for Tendering Old Notes") through ATOP prior to 5:00 p.m., Eastern time on the Expiration Date and (2) the exchange agent must receive a timely confirmation of a book-entry tender of such Old Notes into its account at DTC through ATOP pursuant to the procedure for book-entry transfer through DTC described in the Prospectus under "The Exchange Offer—Procedures for Tendering Old Notes" prior to 5:00 p.m., Eastern time on the Expiration Date. Upon expiration or termination of the exchange offer, the exchange agent will exchange all Old Notes validly tendered and accepted and not validly withdrawn for an equal principal amount of New Notes.

THE METHOD OF DELIVERY OF ALL REQUIRED DOCUMENTS TO THE EXCHANGE AGENT IS AT THE ELECTION AND SOLE RISK OF THE HOLDER AND DELIVERY WILL BE DEEMED TO BE MADE ONLY IF AND WHEN ACTUALLY RECEIVED BY THE EXCHANGE AGENT. INSTEAD OF DELIVERY BY MAIL, HOLDERS SHOULD USE AN OVERNIGHT OR HAND DELIVERY SERVICE. IN ALL CASES, HOLDERS SHOULD ALLOW FOR SUFFICIENT TIME TO ENSURE DELIVERY TO THE EXCHANGE AGENT BEFORE THE EXPIRATION DATE AND PROPER INSURANCE SHOULD BE OBTAINED. HOLDERS MAY REQUEST THEIR BROKER, DEALER, COMMERCIAL BANK, TRUST COMPANY OR NOMINEE TO EFFECT THESE TRANSACTIONS ON THEIR BEHALF. HOLDERS SHOULD NOT SEND ANY DOCUMENTS TO THE COMPANY.

2. <u>WITHDRAWAL OF TENDERS</u>. Tenders of Old Notes may be withdrawn at any time prior to 5:00 p.m., Eastern time, on the Expiration Date. For a withdrawal of tendered Old Notes to be effective, the exchange agent must receive, prior to 5:00 p.m., Eastern time on the Expiration Date, a computer generated notice of withdrawal, transmitted on behalf of the holder in accordance with the appropriate procedures of DTC's ATOP system. Any such notice of withdrawal must (1) specify the name of the tendering holder of Old Notes to be withdrawn, (2) specify the principal amount of the Old Notes delivered for exchange, (3) specify the name and number of the account at DTC to be credited with the withdrawn Old Notes, (4) include a statement that such holder is withdrawing its election to have the Old Notes exchanged, and (5) otherwise comply with the procedures of DTC.

Any Old Notes validly withdrawn will be considered not to have been validly tendered for purposes of the Exchange Offer, and no New Notes will be issued in exchange for such Old Notes. Any Old Notes which have been tendered but which are not accepted for exchange or which are withdrawn will be returned to the holder, without expense to such holder, after withdrawal, rejection of tender or termination of the Exchange Offer. Validly withdrawn Old Notes may be re-tendered by following the procedures described in the Prospectus under the caption "The Exchange Offer—Procedures for Tendering Old Notes" at any time prior to the Expiration Date.

All questions as to the validity, form and eligibility (including time of receipt) of such withdrawal notices will be determined by the Company, in its sole discretion, which determination shall be final and binding on all parties. Although the Company intends to request the exchange agent to notify holders of defects or irregularities relating to tenders and withdrawals of Old Notes, none of the Company, the exchange agent nor any other person will have any duty or incur any liability for failure to give such notification.

- 3. <u>PARTIAL TENDERS</u>. Tenders of Old Notes pursuant to the Exchange Offer will be accepted only in minimum denominations of \$100,000 and any integral multiple of \$1,000 in excess thereof. The "agent's message" described above must include the principal amount of Old Notes held by the holder to be tendered. If the entire principal amount of all Old Notes held by the holder is not tendered, then Old Notes for the principal amount of the Old Notes not tendered will be returned by credit to the holder's account at DTC, following the Expiration Date.
- 4. <u>TAXPAYER IDENTIFICATION NUMBER AND IRS FORM W-9</u>. Each tendering holder should provide the exchange agent with its correct taxpayer identification number, which, in the case of a holder who is an individual, is his or her social security number. If the exchange agent is not provided with the correct taxpayer identification number or an adequate basis for an exemption, the holder may be subject to backup withholding in an amount currently equal to up to 28% of any reportable payments made with respect to the Old Notes and a \$50 penalty imposed by the Internal Revenue Service. If withholding results in an over-payment of taxes, a refund may be obtained.

To prevent backup withholding on any reportable payments, each holder tendering Old Notes must provide such holder's correct taxpayer identification number by completing the included IRS Form W-9, certifying (under penalties of perjury) that such holder is a U.S. person (including a resident alien), that the taxpayer identification number provided is correct (or that such holder is awaiting a taxpayer identification number), and that (1) such holder is exempt from backup withholding, (2) the holder has not been notified by the Internal Revenue Service that such holder is subject to backup withholding as a result of failure to report all interest or dividends or (3) the Internal Revenue Service has notified the holder that such holder is no longer subject to backup withholding. See the instructions to the included IRS Form W-9.

Certain holders (including, among others, certain non-United States individuals) tendering Old Notes are exempt from these backup withholding and reporting requirements. To prevent possible erroneous backup withholding, an exempt holder that is a U.S. person (as defined in the instructions to the IRS Form W-9) should provide its correct taxpayer identification number and check the "Exempt payee" box on the IRS Form W-9. In order for a non-U.S. person to qualify as exempt, such person must submit an appropriate IRS Form W-8 (for example, an IRS Form W-8BEN). An IRS Form W-8 may be obtained from the Internal Revenue Service website at www.irs.gov or from the exchange agent.

The Company reserves the right in its sole discretion to take whatever steps are necessary to comply with its obligation regarding backup withholding. Holders are urged to consult with their own tax advisors to determine if they are exempt from backup withholding.

- 5. <u>TRANSFER TAXES</u>. The Company will pay all transfer taxes, if any, applicable to the exchange of the Old Notes under the Exchange Offer. The tendering holder will be required to pay any transfer taxes, whether imposed on the registered holder or any other person, if: (1) New Notes and/or substitute Old Notes not exchanged are to be delivered to, or registered or issued in the name of, any person other than the registered holder of the Old Notes so exchanged; (2) tendered Old Notes are registered in the name of any person other than the person signing the letter of transmittal; or (3) a transfer tax is imposed for any reason other than the exchange of Old Notes under the Exchange Offer. If satisfactory evidence of payment of transfer taxes is not submitted with this letter of transmittal, the amount of any transfer taxes will be billed to the tendering holder.
- 6. <u>IRREGULARITIES</u>. All questions as to the validity, form, eligibility, time of receipt, acceptance and withdrawal of any tenders of Old Notes pursuant to the procedures described in the Prospectus and the form and

validity of all documents will be determined by the Company, in its sole discretion, which determination shall be final and binding on all parties. The Company reserves the absolute right, in its sole and absolute discretion, to reject any and all Old Notes not properly tendered or any Old Notes whose acceptance by the Company would, in the opinion of the Company's counsel, be unlawful. The Company also reserves the absolute right, in its sole discretion subject to applicable law, to waive or amend any of the conditions of the Exchange Offer, in whole or in part at any time and from time to time or to waive any defects, irregularities or conditions of tender as to any particular Old Notes. The Company's interpretation of the terms and conditions of the Exchange Offer (including the instructions in this letter of transmittal) shall be final and binding on all parties. No alternative, conditional or contingent tenders will be accepted. Unless waived, any defects or irregularities in connection with tenders of Old Notes must be cured within a time period the Company shall reasonably determine. The Company is not required to waive defects and is not required to notify any holder of defects in its tender. Although the Company intends to request the exchange agent to notify holders of defects or irregularities relating to tenders and withdrawals of Old Notes, neither the Company, the exchange agent nor any other person will have any duty or incur any liability for failure to give such notification. Each tendering holder, by delivery of an agent's message, waives any right to receive any notice of the acceptance of such tender. Tenders of Old Notes shall not be considered to have been made until such defects and irregularities have been cured or waived. If the Company waives any terms or conditions with respect to a holder, it will extend the same waiver to all noteholders with respect to that term or condition. Any Old Notes received by the exchange agent that are not validly tendered and as to which the defects or i

7. <u>REQUESTS FOR ASSISTANCE OR ADDITIONAL COPIES</u>. Questions relating to the procedure for tendering, as well as requests for assistance or additional copies of the Prospectus and this letter of transmittal may be directed to the exchange agent at the address, telephone number and email address set forth above. Holders may also contact their broker, dealer, commercial bank, trust company or other nominee for assistance concerning the Exchange Offer. If you are a broker-dealer and wish to receive additional copies of the Prospectus and any amendments or supplements thereto, please contact the exchange agent at the address, telephone number and email address set forth above.

IMPORTANT: BY USING DTC'S ATOP PROCEDURES TO TENDER AND EXCHANGE OLD NOTES, YOU WILL NOT BE REQUIRED TO DELIVER THIS LETTER OF TRANSMITTAL TO THE EXCHANGE AGENT. HOWEVER, YOU WILL BE BOUND BY ITS TERMS, AND YOU WILL BE DEEMED TO HAVE MADE THE ACKNOWLEDGMENTS AND THE REPRESENTATIONS AND WARRANTIES IT CONTAINS, JUST AS IF YOU HAD SIGNED IT.