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

FORM 10-K

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended December 31, 2022

or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

Commission File Number 001-38955

HarborOne Bancorp, Inc.
(Exact name of registrant as specified in its charter)

Massachusetts **(State or other jurisdiction of incorporation or organization)**	**81-1607465** **(I.R.S. Employer Identification No.)**
770 Oak Street, Brockton, Massachusetts **(Address of principal executive offices)**	**02301** **(Zip Code)**

(508) 895-1000
(Registrant's telephone number, including area code)

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol(s)	Name of Each Exchange on Which Registered
Common Stock, $0.01 par value	**HONE**	**The NASDAQ Stock Market, LLC**

Securities Registered Pursuant to Section 12(g) of the Act:
None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. ☐ Yes ☒ No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. ☐ Yes ☒ No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days. ☒ Yes ☐ No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). ☒ Yes ☐ No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act:

Large accelerated filer ☐	Accelerated filer ☒
Non-accelerated filer ☐	Smaller reporting company ☐
	Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements. ☐

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b). ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). ☐ Yes ☒ No

The aggregate market value of the voting and non-voting common stock held by non-affiliates of the Registrant as of its last completed second fiscal quarter was $531,687,240.

As of March 1, 2023, there were 48,275,163 shares of the Registrant's common stock, par value $0.01 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Registrant's Proxy Statement for the 2023 Annual Meeting of Shareholders are incorporated herein by reference in Part III of this Annual Report on Form 10-K to the extent stated herein. Such proxy statement will be filed with the Securities and Exchange Commission within 120 days of the Registrant's fiscal year ending December 31, 2022.

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Forward-Looking Statements

Certain statements contained in this Annual Report on Form 10-K that are not historical facts may be considered forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act") and are intended to be covered by the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. These statements, which are based on certain current assumptions and describe our future plans, strategies and expectations, can generally be identified by the use of the words "may," "will," "should," "could," "would," "potential," "developments," "strategic," "launching," "opportunities," "plans," "estimates," "projects," "believes," "intends," "anticipates," "expects," "targets" and similar expressions. These statements include, among others, statements regarding the impact of the COVID-19 pandemic; our strategy, goals and expectations; evaluations of future interest rate trends and liquidity; expectations as to growth in assets, deposits and results of operations, future operations, market position and financial position; and prospects, plans and objectives of management. You should not place undue reliance on our forward-looking statements. You should exercise caution in interpreting and relying on forward-looking statements because they are subject to significant risks, uncertainties and other factors which are, in some cases, beyond our control.

Forward-looking statements are based on the current assumptions and beliefs of management and are only expectations of future results. The Company's actual results could differ materially from those projected in the forward-looking statements as a result of, among others, factors referenced under the section captioned "Risk Factors" at Part I, Item 1A of this Form 10-K; changes in general business and economic conditions (including inflation) on a national basis and in the local markets in which the Company operates, including changes that adversely affect borrowers' ability to service and repay the Company's loans, changes in customer behavior, ongoing turbulence in the capital and debt markets and the impact of such conditions on the Company's business activities, changes in interest rates, increases in loan default and charge-off rates, changes related to the discontinuation and replacement of LIBOR, decreases in the value of securities in the Company's investment portfolio, fluctuations in real estate values, the possibility that future credit losses may be higher than currently expected due to changes in economic assumptions, customer behavior or adverse economic developments, the adequacy of reserves for credit losses, decreases in deposit levels necessitating increased borrowing to fund loans and investments, competitive pressures from other financial institutions, acquisitions may not produce results at levels or within time frames originally anticipated, cybersecurity incidents, fraud, natural disasters, war, terrorism, civil unrest, the ongoing COVID-19 pandemic, and future pandemics, changes in regulation, changes in accounting standards and practices, the risk that goodwill and intangibles recorded in the Company's financial statements will become impaired, demand for loans in the Company's market area, the Company's ability to attract and maintain deposits, risks related to the implementation of acquisitions, dispositions, and restructurings, the risk that the Company may not be successful in the implementation of its business strategy; and changes in assumptions used in making such forward-looking statements. Forward-looking statements speak only as of the date on which they are made. The Company does not undertake any obligation to update any forward-looking statement to reflect circumstances or events that occur after the date the forward-looking statements are made.

PART I

ITEM 1. BUSINESS

HarborOne Bancorp, Inc.

HarborOne Bancorp, Inc. (hereafter referred to as "we," "our," "us," "HarborOne Bancorp" or the "Company") is a Massachusetts corporation formed in 2016 as a bank holding company, headquartered in Brockton, Massachusetts. The Company owns all of the outstanding stock of HarborOne Bank (the "Bank"), a state-chartered trust company. At December 31, 2022, the Company had total assets of $5.36 billion, deposits of $4.19 billion and stockholders' equity of $617.0 million on a consolidated basis.

The Consolidated Financial Statements included herein include the accounts of the Company, Legion Parkway Security Company, LLC, a security corporation and subsidiary of the Company formed on July 13, 2016, the Bank, and the Bank's wholly-owned subsidiaries, including HarborOne Mortgage, LLC ("HarborOne Mortgage"). The Company has two charitable foundations, The HarborOne Foundation and The HarborOne Foundation of Rhode Island.

HarborOne Bancorp, Inc.'s corporate offices are located at 770 Oak Street, Brockton, Massachusetts 02301, and the telephone number is (508) 895-1000.

HarborOne Bank

HarborOne Bank is a state-chartered trust company that was originally established in 1917 as a state-chartered credit union. The Bank provides a variety of financial services to individuals and businesses online and through its 31 full-service branches located in Massachusetts and Rhode Island, and commercial lending offices in each of Boston, Massachusetts and Providence, Rhode Island. The Bank also provides a range of educational services through “HarborOne U,” with free digital content, webinars, and recordings for small business and personal financial education.

HarborOne Mortgage

HarborOne Mortgage, LLC, a wholly-owned subsidiary of the Bank, is a residential mortgage company headquartered in New Hampshire that maintains offices in Maine, Massachusetts, New Hampshire, New Jersey, and Rhode Island, and is licensed to lend in six additional states.

Employees and Human Capital Resources

As of December 31, 2022, the Company had 609 full-time-equivalent employees. None of the Company’s employees are represented by a labor union, and the Company’s management (“Management”) considers its relationship with employees to be good. The Company is an equal opportunity employer and maintains hiring practices and policies that foster and promote a diverse and inclusive workforce. We strive to create an inclusive environment and are dedicated to recruiting, developing and promoting a diverse workforce to meet the current and future demands of our business.

Our commitment to diversity is delivered through an executive diversity committee and an all-level advisory council connected to our internal and external communities. Additionally, the Company engages managers and employees through the One Experience initiative and committee. We believe our ability to attract, develop and retain employees is a key to the Company’s success. Accordingly, we strive to offer competitive salaries and employee benefits to all employees and monitor salaries in our market areas.

We encourage and support the growth and development of our employees and empower them by providing continual learning and career development, ongoing performance and development conversations, internally developed training programs, customized corporate training engagements, and educational reimbursement programs.

The success of our business is fundamentally connected to the well-being of our employees and accordingly, we are committed to the health, safety, and wellness of them. We promote the health and wellness of our employees by strongly encouraging work-life balance and sponsoring various wellness programs and offer flexible scheduling.

Available Information

Under Section 13(a) or 15(d) of the Exchange Act of 1934, as amended (the “Exchange Act”), HarborOne Bancorp, Inc. is required to file reports, proxy and information statements and other information with the Securities and Exchange Commission (“SEC”). The Company electronically files its annual report on Form 10-K, proxy, quarterly reports on Form 10-Q, and current reports on Form 8-K and other reports as required with the SEC. The SEC website, at www.sec.gov provides access to all forms which have been filed electronically. Additionally, the Company’s SEC filings including exhibits and amendments, and additional shareholder information are available free of charge on the Company’s website, www.harborone.com (within the Investor Relations section) as soon as reasonably practicable after they are filed with or furnished to the SEC. Information on our website is not and should not be considered part of this annual report.

The Company’s common stock is traded on the NASDAQ stock market under the symbol “HONE.”

Market Area

HarborOne Bank. HarborOne Bank provides financial services to individuals, families, small and mid-size businesses and municipalities throughout Eastern Massachusetts and Rhode Island. While our primary deposit-gathering area is concentrated within our branch office communities and surrounding cities and towns, our lending area encompasses the broader market of New England.

Due to our proximity to Boston and Providence, our primary market area benefits from the presence of numerous institutions of higher learning, medical care and research centers and the corporate headquarters of several investment and financial services companies. The greater Boston metropolitan area also has many life science and high technology companies employing personnel with specialized skills, which impacts the demand for residential homes, residential construction, office buildings, shopping centers, and other commercial properties in our market area. Communities within our market area include many older residential commuter towns, which function partially as business and service centers.

HarborOne Mortgage. HarborOne Mortgage maintains offices in Maine, Massachusetts, New Hampshire, New Jersey, and Rhode Island, and is licensed to lend in six additional states, with 92% of originations in New England.

Competition

HarborOne Bank. HarborOne Bank faces significant competition for deposits and loans. Our most direct competition for deposits has historically come from banking institutions operating in our primary market area and from other financial service companies, such as securities brokerage firms, credit unions, insurance companies, and other non-bank financial services and financial technology companies. We also face competition for customers' funds from money market funds and mutual funds. Many of the banks that operate in our primary market area are owned by large national and regional holding companies, are larger than we are, and therefore may have greater resources or offer a broader range of products and services.

Our competition for loans comes from financial institutions, including credit unions, in our primary market area and from other financial service providers, such as mortgage companies and mortgage brokers. Competition for loans also comes from non-depository financial service companies entering the mortgage market, such as insurance companies, securities companies and specialty finance companies.

We expect competition to increase in the future as a result of legislative, regulatory and technological changes and the continuing trend of consolidation in the financial services industry. Technological advances, for example, have lowered barriers to entry, allowed banks and other financial services companies to expand their geographic reach by providing services over the internet, and made it possible for non-depository institutions to offer products and services that traditionally have been provided by banks. Increased competition for deposits and the origination of loans could limit our growth in the future.

HarborOne Mortgage. HarborOne Mortgage faces competition for originating loans both directly within the markets in which it operates and from entities that provide services throughout the United States through internet channels. HarborOne Mortgage's competition comes principally from other mortgage banking firms, as well as from commercial banks, savings institutions, credit unions and non-bank financial services and financial technology companies.

Lending Activities

The scope of the discussion included under "Lending Activities" is limited to lending operations related to loans originated for investment. A discussion of the lending activities related to loans originated for sale is included under "*Mortgage Banking Activity*."

Commercial Real Estate Loans. Our commercial real estate loans are generally secured by properties used for business purposes such as office buildings, retail development, manufacturing facilities, warehouse distribution, hospitality and apartment buildings. We currently focus our commercial real estate efforts on small- and mid-size owner occupants and investors in our market area seeking loans between $350,000 and $30.0 million. At December 31, 2022, commercial real estate loans were $2.25 billion, or 49.5% of total loans, and consisted of $1.35 billion of fixed-rate loans and $901.5 million of adjustable-rate loans.

We originate fixed- and adjustable-rate commercial real estate loans typically with terms of five to ten years, although loans may be for terms of up to 20 years. Interest rates and payments on our adjustable-rate loans typically adjust in accordance with a designated index. Most of our adjustable-rate commercial real estate loans adjust every 30 days to a specified percentage above term SOFR, or five years to a specified percentage above the corresponding FHLB Classic Advance borrowing rate and amortize over a 25- to 30-year term. We also offer interest rate swaps to accommodate customer needs. Loan amounts generally do not exceed 75% of the property's appraised value at the time the loan is originated.

We consider a number of factors when underwriting commercial real estate loans that include projected net cash flow to the loan's debt service requirement, the age and condition of the collateral, the profitability and the value of the underlying property, the financial resources and income level of the sponsor and their experience in owning or managing similar properties, and the borrower's credit history. When circumstances warrant, personal guarantees are obtained from the principals of the borrower on commercial real estate. To monitor cash flows on income properties, we require borrowers and loan guarantors, where applicable, to provide annual financial statements on commercial real estate loans. We also generally require an independent appraisal or valuation, an environmental survey, and a property condition report for commercial real estate loans.

In addition to originating these loans, we participate in commercial real estate loans with other financial institutions located primarily in Massachusetts and Rhode Island and sell participation interests in commercial real estate loans to local financial institutions, primarily the portion of loans that exceed our borrowing limits or are in an amount that is considered prudent to manage our credit risk. See below "*Loan Underwriting Risks – Loan Participations.*"

At December 31, 2022, the average loan balance of our outstanding commercial real estate loans was $4.2 million, and our five largest loans ranged from $27.0 million to $40.9 million. These loans were performing in accordance with their original terms at December 31, 2022. Our largest commercial real estate relationship, consisting of a portfolio of six boutique hotel properties, totaled $62.8 million.

Commercial and Industrial Loans. We originate commercial and industrial loans and lines of credit to a variety of professionals, sole proprietorships and small- to medium-sized privately-held businesses, primarily in Massachusetts and Rhode Island, with sales typically up to $100 million and borrowing needs up to $25 million, for working capital and other business purposes. Our small business lending team generates small business loans, including loans originated through the U.S. Small Business Administration ("SBA"), which provide a partial government guarantee. Small business loans, including real estate loans, generally consist of loans to businesses with commercial credit needs of less than or equal to $3.0 million and revenues of less than $5.0 million.

At December 31, 2022, commercial and industrial loans were $424.3 million, or 9.3% of total loans. Commercial and industrial loans included $142.2 million in small business loans, of which $36.1 million had a partial SBA guarantee and $2.1 million of loans provided through the SBA's Paycheck Protection Program ("PPP") with deferred fees to be recognized over the life of the loan or at forgiveness of $65,000. At December 31, 2022, commercial loans consisted of $192.2 million of fixed-rate loans and $232.1 million of adjustable-rate loans.

Commercial and industrial loans are originated with either variable or fixed rates of interest. Variable rates are based on a margin over a SOFR index, or tied to the Prime rate as published in *The Wall Street Journal*, plus a margin. Fixed-rate business loans are generally indexed to a corresponding FHLB rate, plus a margin. Commercial and industrial loans typically have shorter maturity terms and higher interest spreads than real estate loans, but generally involve more credit risk because of the type and nature of the collateral. We generally require that our commercial customers maintain a deposit relationship with the Bank.

When making commercial and industrial loans, we consider the financial statements and the experience of the borrower, our lending history with the borrower, the debt service capabilities of the borrower, the projected cash flows of the business, the value of the collateral, primarily accounts receivable, inventory and equipment and recourse from principal owners. Commercial and industrial loan amounts are determined based on the capacity for debt service and an evaluation of the age, condition and collectability of the collateral, but generally, advance rates for certain asset classes would not exceed 80%.

In addition to originating these loans, we participate in commercial and industrial loans with other financial institutions located primarily in Massachusetts and Rhode Island and sell participation interests in commercial and industrial loans to local financial institutions, primarily the portion of loans that exceed our borrowing limits or are in an amount that is considered prudent to manage our credit risk. See below "*Loan Underwriting Risks – Loan Participations.*"

At December 31, 2022, the average outstanding balance of our commercial loans, excluding PPP loans, was $256,000, and our five largest commercial loan exposures ranged from $11.1 million to $19.1 million. These loans are secured by business assets of the borrowers and include loans in the alternative energy, healthcare and educational services industries. The loans were performing according to their original terms at December 31, 2022.

Commercial Construction Loans. We originate commercial construction loans for commercial development projects, including industrial buildings, retail and office buildings, and speculative residential real estate. At December 31, 2022, construction loan balances were $199.3 million, or 4.4% of total loans. At December 31, 2022, our commercial construction loan portfolio consisted of $98.3 million in loan balances that were secured by speculative residential real estate loan projects, $85.2 million in loans that were secured by commercial real estate speculative projects, and $15.8 million secured by owner-occupied commercial real estate projects. At December 31, 2022, unadvanced funds on commercial construction loans were $244.9 million.

Our commercial construction loans generally call for the payment of interest only with interest rates tied to a SOFR index or the Prime rate as published in *The Wall Street Journal*, plus a margin. Our construction loans for commercial real estate projects can be originated with principal balances of up to $30.0 million, but generally their principal balances are lower; the average originated principal balance at December 31, 2022 was $10.1 million. Advances on commercial construction loans are made in accordance with a schedule reflecting the cost of construction, and repayment is generally expected from permanent financing upon completion of construction.

At December 31, 2022, the average balance of our outstanding commercial construction loans was $4.2 million, and our largest commercial construction loan is $30.2 million to finance the acquisition and construction of an industrial building located in Southeastern Massachusetts with a current outstanding balance of $4.9 million. This loan was performing according to its original repayment terms at December 31, 2022.

One- to Four-Family Residential Real Estate Loans. We provide residential real estate loans through HarborOne Mortgage for home purchase or refinancing of existing homes, most of which serve as the primary residence of the owner. At December 31, 2022, residential mortgage loans were $1.43 billion, or 31.5% of total loans, and consisted of $1.28 billion and $153.8 million of fixed-rate and adjustable-rate loans, respectively. We offer fixed-rate and adjustable-rate residential mortgage loans with terms up to 30 years.

Our one- to four-family residential mortgage originations are generally underwritten to conform to Federal National Mortgage Association, or "Fannie Mae," and Federal National Home Loan Mortgage Corporation, or "Freddie Mac," underwriting guidelines. Our adjustable-rate mortgage loans generally adjust semi-annually or annually after an initial fixed period that ranges from three to ten years and are adjusted to a rate equal to a specified percentage above a SOFR index or U.S. Treasury index. Depending on the loan type, the maximum amount by which the interest rate may be increased or decreased is generally 2.0% per adjustment period, with the lifetime interest rate caps ranging from 5.0% to 6.0% over the initial interest rate of the loan.

Borrower demand for adjustable-rate compared to fixed-rate loans is a function of the level of interest rates, the expectations of changes in the level of interest rates, and the difference between the interest rates and loan fees offered for fixed-rate mortgage loans as compared to the interest rates and loan fees for adjustable-rate loans. The relative amount of fixed-rate and adjustable-rate mortgage loans that can be originated at any time is largely determined by the demand for each in a competitive environment. The loan fees, interest rates and other provisions of mortgage loans are determined by us on the basis of our own pricing criteria and competitive market conditions.

While residential mortgage loans are normally originated with up to 30-year terms, such loans typically remain outstanding for substantially shorter periods, because borrowers often prepay their loans in full either upon sale of the property pledged as security or upon refinancing the original loan. Therefore, average loan maturity is a function of, among other factors, the level of purchase and sale activity in the real estate market, prevailing interest rates, and the interest rates payable on outstanding loans.

We originate one- to four-family residential mortgage loans with loan-to-value ratios up to 80%, and we generally require private mortgage insurance for residential loans secured by a first mortgage with a loan-to-value ratio over 80%. We generally require all properties securing mortgage loans to be appraised by a licensed real estate appraiser. We generally require title insurance on all first mortgage loans. Exceptions to these lending policies are based on an evaluation of credit risk related to the borrower and the size of the loan. Borrowers must obtain hazard insurance, and flood insurance is required for loans on properties located in a flood zone.

In an effort to provide financing for first-time buyers, we offer adjustable- and fixed-rate loans to qualified individuals and originate the loans using modified underwriting guidelines, reduced interest rates and loan conditions, and reduced closing costs. We also participate in publicly sponsored loan programs which provide competitive terms for low- and moderate-income home buyers.

The majority of the conforming fixed-rate one- to four-family residential mortgage loans we originate are sold on the secondary market to private investors, Freddie Mac, and Fannie Mae. Generally, we sell loans to Freddie Mac and Fannie Mae with servicing retained. Our current practice is to hold in our portfolio jumbo loans, nonconforming loans, and adjustable-rate loans. Our decision to sell loans is based on prevailing market interest rate conditions and interest rate risk management.

We generally do not: (i) originate "interest only" mortgage loans on one- to four-family residential properties; (ii) offer loans that provide for negative amortization of principal such as "option ARM" loans where the borrower can pay less than the interest owed on their loan; (iii) offer "subprime" loans (loans that are made with low down payments to borrowers with weakened credit histories typically characterized by payment delinquencies, previous charge-offs, judgments, bankruptcies or borrowers with questionable repayment capacity); or (iv) offer "Alt-A" loans (loans to borrowers having less than full documentation).

Second Mortgages and Equity Lines of Credit. We offer second mortgages and equity lines of credit, which are secured by owner-occupied residences. At December 31, 2022, second mortgages and equity lines of credit were $166.2 million, or 3.7% of total loans. Second mortgages are made at fixed interest rates and terms of up to fifteen years. Equity lines of credit have adjustable rates of interest that are indexed to the Prime rate as published in *The Wall Street Journal,* plus or minus a margin, and generally are subject to an interest rate floor, with ten-year draws and repayment terms of between five and 15 years. We offer second mortgages and equity lines of credit with cumulative loan-to-value ratios generally up to 80%, when taking into account both the balance of the home equity loan and first mortgage loan. We hold a first mortgage position on the homes that secure equity lines of credit in approximately one-third of the portfolio.

The procedures for underwriting home equity lines of credit include an assessment of the applicant's payment history on other debts and ability to meet existing obligations and payments on the proposed loan. Although the applicant's creditworthiness is a primary consideration, the underwriting process also includes a comparison of the value of the collateral to the proposed loan amount. The procedures for underwriting residential mortgage loans apply equally to second mortgages and equity lines of credit.

Residential Construction Loans. We originate residential real estate construction loans through HarborOne Mortgage to professional developers, contractors and builders, and to a lesser extent, to individuals, to finance the construction of residential dwellings. At December 31, 2022, the balance of residential construction loans was $35.8 million and unadvanced funds were $18.0 million.

Our residential real estate construction loans generally are fixed-rate loans that provide for the payment of interest only during the construction phase, which is usually 12 to 36 months. At the end of the construction phase, the loan may be paid in full or converted to a permanent mortgage loan. Before making a commitment to fund a construction loan, we generally require an appraisal of the property by an independent licensed appraiser. Our loan policy dictates a minimum equity contribution by the borrower of 20.0% and a loan-to-value ratio not greater than 80.0% of the appraised market value estimated upon completion of the project. All borrowers are underwritten and evaluated for creditworthiness based on past experience, debt service ability, net worth analysis including available liquidity, and other credit factors. Advances are only made following an inspection of the property confirming completion of the required progress on the project and an update to the title completed by a Bank-approved attorney.

Auto and Other Consumer Loans. While we stopped originating indirect auto loans in 2018, we continued in 2019 to fund indirect auto lease loans for the leasing of new or used automobiles through our relationship with Credit Union Leasing of America, or "CULA." In the fourth quarter of 2019, we terminated our origination agreement with CULA, and we continue to allow the portfolio to pay down with CULA providing the off-lease servicing. At December 31, 2022, auto loans were $33.6 million, or 0.7% of total loans and 81.2% of consumer loans. Other consumer loans, consisting primarily of unsecured lines of credit and personal loans, were $7.8 million at December 31, 2022, or 0.2% of total loans.

The procedures for underwriting consumer loans include an assessment of the applicant's payment history on other debts and ability to meet existing obligations and payments on the proposed loan. Although the applicant's creditworthiness is a primary consideration, the underwriting process also includes a comparison of the value of the collateral, if any, to the proposed loan amount.

Loan Originations, Purchases and Sales. Loan originations come from a number of sources. The primary source of loan originations are our loan originators, and to a lesser extent, advertising and referrals from customers. We purchase participation interests in commercial real estate loans and commercial business loans. In addition, we sell participation interests in commercial real estate loans to local financial institutions, primarily the portion of loans that exceed our borrowing limits or are in an amount that is considered prudent to manage our credit risk.

Our current practice is generally (i) to sell to the secondary market newly originated 15-year or longer term conforming fixed-rate residential mortgage loans, and (ii) to hold in our portfolio nonconforming loans, shorter-term fixed-rate loans, jumbo loans and adjustable-rate residential mortgage loans. Our decisions regarding loan sales are based on prevailing market interest rate conditions and interest rate risk management. Loans are sold to third parties with servicing either retained or released.

During the years ended December 31, 2022 and 2021 we purchased $58.3 million and $26.8 million, respectively, of residential real estate loan pools, and we may consider purchasing additional loan pools in the future.

For the years ended December 31, 2022 and 2021, we originated loans of $2.38 billion and $3.47 billion, respectively. During the same periods, we purchased, including participations in loans originated by other banks, $288.6 million and $145.2 million, of loans, respectively, and we sold, including participations by other financial institutions in loans originated by the Bank, $755.8 million and $2.22 billion of loans, respectively.

Mortgage Banking Activity. We originate residential mortgage loans through HarborOne Mortgage. For the year ended December 31, 2022, HarborOne Mortgage closed $1.02 billion in mortgage loans. HarborOne Mortgage sells loans on both a servicing-released and a servicing-retained basis. Loans sold with servicing retained are generally serviced by a third party, although certain loans are serviced by the Bank. HarborOne Bank purchases residential mortgage loans for its portfolio from HarborOne Mortgage. These purchases generally consist of jumbo mortgages, adjustable-rate mortgages, and nonconforming mortgages. The Bank's decision to purchase loans from HarborOne Mortgage is based on prevailing market interest rate conditions, interest rate risk management, and balance sheet management.

Our overall margin can be affected by the mix of both loan type (conventional loans versus governmental loans) and loan purpose (purchase versus refinance). Conventional loans include loans that conform to Fannie Mae and Freddie Mac standards, whereas governmental loans are those loans guaranteed or insured by the federal government, such as a Federal Housing Authority or a U.S. Department of Veterans Affairs loan.

Loan Underwriting Risks

Commercial Real Estate Loans. Loans secured by commercial real estate generally have larger balances and involve a greater degree of risk than residential mortgage loans. Of primary concern in commercial real estate lending is the borrower's creditworthiness and the feasibility and cash flow potential of the project. In addition, our commercial borrowers may have more than one loan outstanding with us. Consequently, an adverse development with respect to one loan or one credit relationship can expose us to significantly greater risk of loss compared to an adverse development with respect to a one- to four-family residential mortgage loan. Payments on loans secured by income properties often depend on successful operation and management of the properties. As a result, repayment of such loans may be subject to adverse conditions in the real estate market or the economy to a greater extent than residential real estate loans. If we are forced to foreclose on a commercial real estate property due to default, we may not be able to recover all of the unpaid balance of, and accrued interest on, the loan as well as related foreclosure and holding costs.

Commercial Loans. Commercial loans also involve a greater degree of risk than residential mortgage loans. Unlike residential mortgage loans, which generally are made on the basis of the borrower's ability to make repayment from his or her employment or other income, and which are secured by real property whose value tends to be more easily ascertainable, commercial loans are typically made on the basis of the borrower's ability to make repayment from the cash flows of the borrower's business, although small business loans originated through the SBA program include a partial guarantee. As a result, the availability of funds for the repayment of commercial loans may depend substantially on the success of the business itself. Further, any collateral securing such loans may depreciate over time, may be difficult to appraise, and may fluctuate in value.

Commercial Construction Loans. Construction financing is considered to involve a higher degree of risk of loss than long-term financing on improved, occupied real estate. Risk of loss on a construction loan depends largely upon the accuracy of the initial estimate of the property's value at completion of construction or development and the estimated cost (including interest) of construction. During the construction phase, a number of factors could result in delays and cost overruns. If the estimate of construction costs proves to be inaccurate, we may be required to advance funds beyond the amount originally committed to permit completion of the development. If the estimate of value proves to be inaccurate, we may be confronted, at or before the maturity of the loan, with a project having a value which is insufficient to assure full repayment. As a result of the foregoing, construction lending often involves the disbursement of substantial funds with repayment dependent, in part, on the success of the ultimate project rather than the ability of the borrower or guarantor to repay principal and interest. If we are forced to foreclose on a project before or at completion due to a default, we may not be able to recover all of the unpaid balance of, and accrued interest on, the loan as well as related foreclosure and holding costs.

Residential Real Estate Loans. Due to historically low interest rate levels, borrowers generally have preferred fixed-rate loans in recent years. While we anticipate that our adjustable-rate loans will better offset the adverse effects on our net interest income of an increase in interest rates as compared to fixed-rate loans, the increased mortgage payments required of adjustable-rate loans in a rising interest rate environment could cause an increase in delinquencies and defaults. If we are forced to foreclose on a residential property due to default, the marketability of the underlying property also may be adversely affected in a high interest rate environment, and we may not be able to recover all of the unpaid balance of, and accrued interest on, the loan as well as related foreclosure and holding costs. In addition, although adjustable-rate loans help make our asset base more responsive to changes in interest rates, the extent of this interest sensitivity is limited by the annual and lifetime interest rate adjustment limits.

Consumer Loans. Consumer loans entail greater risk than do residential mortgage loans, particularly in the case of consumer loans that are unsecured or secured by assets that depreciate rapidly. In such cases, repossessed collateral for a defaulted consumer loan may not provide an adequate source of repayment for the outstanding loan and the remaining deficiency often does not warrant further substantial collection efforts against the borrower. In addition, consumer loan collections depend on the borrower's continuing financial stability, and therefore are more likely to be adversely affected by job loss, divorce, illness or personal bankruptcy. Furthermore, the application of various federal and state laws, including federal and state bankruptcy and insolvency laws, may limit the amount that can be recovered on such loans.

Loan Participations. We cultivate relationships with other financial institutions to mitigate the risk of our lending activities by participating either as the lead bank or as a participant in various loan transactions. We purchase participation interests in larger balance loans from other financial institutions generally in our market area. Such participations are evaluated with the same level of due diligence and care as loans we originate. The participations are underwritten, reviewed for compliance, and approved in accordance with our underwriting policies and criteria. We actively monitor the performance of such loans and periodically receive updated financial statements of the borrower from the lead lender in accordance with loan reporting requirements and covenant testing. These loans are reviewed annually in accordance with our loan policy and graded based on credit risk. Loan grades assigned are also tested by the Company's external loan review firm in accordance with the Company's loan review policy.

We participated in commercial real estate loans with outstanding balances of $327.2 million, commercial construction loans with outstanding balances of $63.4 million, and commercial and industrial loans with outstanding balances of $19.7 million at December 31, 2022. At December 31, 2021, we participated in commercial real estate loans with outstanding balances of $250.4 million, commercial construction loans with outstanding balances of $32.7 million, and commercial and industrial loans with outstanding balances of $18.3 million.

We sell loan participations in the ordinary course of business when a loan originated by us exceeds our legal lending limit or we otherwise deem it prudent to share the risk with another lending institution. We were the lead bank in commercial real estate loans of $694.6 million, commercial construction loans of $67.8 million, and commercial and industrial loans of $120.0 million, with participation balances sold that totaled $280.3 million, $26.8 million and $59.3 million, respectively, at December 31, 2022. As compared to December 31, 2021, this represents an increase of $74.6 million in commercial real estate participations sold, an increase of $4.9 million in commercial construction participations sold, and a decrease of $2.0 million in commercial and industrial participations sold.

Loan Approval Procedures and Authority. Our lending activities follow written, nondiscriminatory underwriting standards and loan origination procedures established by our board of directors (the "Board of Directors") and Management. Our Board of Directors has granted loan approval authority to certain executive officers. Commercial loans in excess of any officer's individual authority must be approved by the Commercial Loan Committee, which is comprised of several executive officers and reviews all commercial and industrial loan requests greater than $3.0 million and commercial real estate loan requests greater than $7.5 million.

Loans-to-One Borrower Limit. The maximum amount that the Bank may lend to one borrower and the borrower's related entities is generally limited, by statute, to 20.0% of the Bank's capital, which is defined under Massachusetts law as the sum of the Bank's capital stock, surplus account and undivided profits. At December 31, 2022, the Bank's regulatory limit on loans to one borrower was $114.0 million. At that date, our largest lending relationship, consisting of six boutique hotel properties, totaled $59.1 million. These loans were performing in accordance with their original repayment terms at December 31, 2022. Our internal loans-to-one borrower limit is $88.5 million.

Investment Activities

General. The goals of our investment policy are to provide and maintain liquidity to meet deposit withdrawal and loan funding needs, to help mitigate interest rate and market risk, to diversify our assets, and to generate a reasonable rate of return on funds within the context of our interest rate and credit risk objectives. Our Board of Directors reviews and approves our investment policy annually. Authority to make investments under the approved investment policy guidelines is delegated to our President, our Chief Financial Officer or Treasurer. Investment activity is summarized and reported at the next regularly scheduled meeting of the Board of Directors. We classify the majority of our securities as available-for-sale.

We have legal authority to invest in various types of securities, including U.S. Treasury obligations, securities of various government-sponsored enterprises ("GSEs") and municipal governments, deposits at the Federal Home Loan Bank ("FHLB"), certificates of deposit of federally insured institutions, and investment grade corporate bonds. We also are required to maintain an investment in FHLB stock. While we have the authority under applicable law to invest in marketable equity securities and derivative securities, we had no investments in such securities at December 31, 2022.

Investment Securities. At December 31, 2022, our securities portfolio totaled $321.1 million and consisted of the following:

U.S. Government and GSE Obligations. At December 31, 2022, we had U.S. government and GSE securities totaling $53.5 million, which constituted 16.7% of our securities portfolio. While these securities generally provide lower yields than other investments in our securities portfolio, we maintain these investments, to the extent we deem appropriate, for liquidity purposes, as collateral for borrowings and for prepayment protection.

U.S. Government and Government-Sponsored Mortgage-Backed Securities and Collateralized Mortgage Obligations, or "CMOs." At December 31, 2022, we had mortgage-backed securities and CMOs totaling $259.3 million, which constituted 80.8% of our securities portfolio. Mortgage-backed securities and CMOs are securities issued in the secondary market that are collateralized by pools of residential mortgages. Certain types of mortgage-backed securities are commonly referred to as "pass-through" certificates, because the principal and interest of the underlying loans is "passed through" to investors, net of certain costs, including servicing and guarantee fees. Mortgage-backed securities typically are collateralized by pools of one- to four-family or multi-family mortgages. The issuers of such securities pool and resell the participation interests in the form of securities to investors such as the Bank. The interest rate of the security is lower than the interest rates of the underlying loans to allow for payment of servicing and guaranty fees. All of our mortgage-backed securities are either backed by the Government National Mortgage Association, or "Ginnie Mae," a U.S. government agency, or GSEs, such as Fannie Mae and Freddie Mac.

Residential mortgage-backed securities issued by U.S. government agencies and GSEs are more liquid than individual mortgage loans because there is an active trading market for such securities. In addition, residential mortgage-backed securities may be used to collateralize our borrowings. Investments in residential mortgage-backed securities involve a risk that actual payments will be greater or less than the prepayment rate estimated at the time of purchase, which may require adjustments to the amortization of any premium or accretion of any discount relating to such interests, thereby affecting the net yield on our securities. Current prepayment speeds determine whether prepayment estimates require modification that could cause amortization or accretion adjustments.

SBA Asset-Backed Securities. At December 31, 2022, we had investments in participation certificates issued and guaranteed by the SBA totaling $7.4 million.

Corporate Bonds. At December 31, 2022, we had investments in corporate bonds totaling $1.0 million.

In addition to our securities portfolio, we also have investments in FHLB stock and bank-owned life insurance ("BOLI").

FHLB Stock. In connection with our borrowing activities, we held common stock of the FHLB totaling $20.1 million at December 31, 2022. The FHLB common stock is carried at cost and classified as a restricted equity security. We may be required to purchase additional FHLB stock if we increase FHLB borrowings in the future.

BOLI. We invest in BOLI to provide us with a funding source for our benefit plan obligations. BOLI also generally provides us noninterest income that is non-taxable. At December 31, 2022, our balance in BOLI totaled $92.0 million and was issued by seven highly rated insurance companies.

Sources of Funds

General. Deposits, borrowings and loan repayments are the major sources of our funds for lending and other investment purposes. Scheduled loan repayments are a relatively stable source of funds, while deposit inflows and outflows and loan prepayments are significantly influenced by general interest rates and money market conditions.

Deposit Accounts. At December 31, 2022, total deposits were $4.19 billion. Deposits are attracted from within our market area by sales efforts of our branch network, municipal department and commercial loan officers, advertising and through our website. We offer a broad selection of deposit instruments, including noninterest-bearing demand deposits (such as checking accounts), interest-bearing demand accounts (such as NOW and money market accounts), savings accounts and term certificates of deposit. We also offer a variety of deposit accounts designed for businesses and municipalities operating in our market area. Our business banking deposit products include a commercial checking account, sweep accounts, money market accounts and checking accounts specifically designed for small businesses. We also offer remote deposit capture products for business customers to meet their online banking needs. Additionally, the Bank has a municipal banking department that provides core depository services to local municipalities. At December 31, 2022, municipal deposits totaled $413.5 million and consisted of relationships with over 81 cities and towns. The Bank also participates in a reciprocal deposit program that provides access to deposit products insured by the Federal Deposit Insurance

Corporation ("FDIC") in aggregate amounts exceeding the current insurance limits for depositors. At December 31, 2022, total reciprocal deposits were $28.6 million and included $4.9 million of municipal deposits.

When rates and terms are favorable, the Bank may supplement the customer deposit base with brokered deposits and institutional deposit listing service. At December 31, 2022, we had $301.4 million of brokered deposits, which represented 7.2% of total deposits at December 31, 2022, with such funds having a weighted average remaining term to maturity of approximately one month.

Deposit account terms vary according to the minimum balance required, the time periods the funds must remain on deposit, and the interest rate, among other factors. In determining the terms of our deposit accounts, we consider the rates offered by our competition, our liquidity needs, profitability to us, and customer preferences and concerns. We generally review our deposit mix and pricing on a bi-weekly basis. Our deposit pricing strategy has generally been to offer competitive rates and to periodically offer special rates in order to attract deposits of a specific type or term.

Borrowings. At December 31, 2022, total borrowings were $435.0 million. Borrowings consist of short-term and long-term obligations from the FHLB, and subordinated debentures issued in 2018. The Bank is a member of the FHLB Boston, which provides access to wholesale funding to supplement our supply of investable funds. The FHLB functions as a central reserve bank providing credit for its member financial institutions. As a member, we are required to own capital stock in the FHLB and are authorized to apply for advances on the security of such stock and portions of our loan portfolio identified under a blanket lien, provided certain standards related to creditworthiness have been met. Advances are made under several different programs, each having its own interest rate and range of maturities. Depending on the program, limitations on the amount of advances are based either on a fixed percentage of an institution's net worth or on the FHLB's assessment of the institution's creditworthiness. At December 31, 2022, based on available collateral and our ownership of FHLB stock, we had access to additional FHLB advances of up to $797.4 million. All of our borrowings from the FHLB are secured by a blanket lien on residential real estate and commercial real estate loans.

In August 2018, we issued $35.0 million in fixed-to-floating rate subordinated notes. The notes bear interest at an annual fixed rate of 5.625% until September 1, 2023, at which time the interest resets quarterly to an interest rate per annum equal to the three-month London Interbank Offered Rate ("LIBOR") plus 278 basis points. We anticipate that on September 1, 2023, the interest rate will reset quarterly to an interest rate per annum equal to the three-month CME Term SOFR plus 278 basis points. The notes are carried on the Consolidated Balance Sheets net of issuance costs of $715,000, which are being amortized over the period to maturity date.

The Company also has an available line of credit with the Federal Reserve Bank of Boston ("FRBB") secured by 64.1% of the carrying value of loans with an amortized balance amounting to $100.2 million, of which no amount was outstanding at December 31, 2022.

Supervision and Regulation

General

The following discussion addresses elements of the regulatory framework applicable to bank holding companies and their subsidiaries. This regulatory framework is intended primarily to protect the safety and soundness of depository institutions, the federal deposit insurance system, and depositors, rather than the shareholders of a bank holding company such as the Company.

As a bank holding company, the Company is subject to regulation, examination, and supervision by the Board of Governors of the Federal Reserve System (the "Federal Reserve") under the Bank Holding Company Act of 1956, as amended (the "BHCA"), and by the Massachusetts Commissioner of Banks (the "Commissioner") under Massachusetts law.

As a state-chartered trust company, the Bank is subject to regulation, supervision and examination by the Commissioner under Massachusetts law. The Bank's Rhode Island branches are also subject to regulation, supervision and examination by the Rhode Island Department of Business Regulation, Division of Banking (the "RI Division of Banking"). The Bank's deposits are insured up to applicable limits by the FDIC. On February 24, 2023, at 5 p.m. local time, the Bank exited the Depositors Insurance Fund ("DIF"), a private industry-sponsored insurance fund, which insured deposit amounts in excess of the FDIC insurance limits. All customer non-certificate deposits as of that date and time will remain covered by the DIF insurance for one year until February 24, 2024. Certificate of deposits as of that date and time will remain covered by DIF insurance until their maturity date.

The Bank must also comply with consumer protection regulations issued by the Consumer Financial Protection Bureau (the "CFPB"), as enforced by the FDIC. Additionally, under the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), the Federal Reserve may directly examine the subsidiaries of a bank holding company, including the Bank.

The following is a summary of certain aspects of the various statutes and regulations applicable to the Company and its subsidiaries. This summary is not a comprehensive analysis of all applicable laws, and it is qualified by reference to the full text of statutes and regulations referenced below.

Regulation of the Company

General. The Company is subject to regulation, supervision and examination by the Federal Reserve, which has the authority, among other things, to order bank holding companies to cease and desist from unsafe or unsound banking practices; to assess civil money penalties; and to order termination of non-banking activities or termination of ownership and control of a non-banking subsidiary by a bank holding company.

Source of Strength. Under the BHCA, as amended by the Dodd-Frank Act, the Company is required to serve as a source of financial strength for the Bank. This support may be required at times when the Company may not have the resources to provide support to the Bank. In the event of a bank holding company's bankruptcy, any commitment by the bank holding company to a federal bank regulatory agency to maintain the capital of a bank subsidiary will be assumed by the bankruptcy trustee and entitled to a priority of payment.

Acquisitions and Activities. The BHCA prohibits a bank holding company, without prior approval of the Federal Reserve, from acquiring all or substantially all the assets of a bank; acquiring control of a bank; merging or consolidating with another bank holding company; or acquiring direct or indirect ownership or control of any voting shares of another bank or bank holding company if, after such acquisition, the acquiring bank holding company would control more than 5% of any class of the voting shares of such other bank or bank holding company.

The BHCA also generally prohibits a bank holding company from engaging directly or indirectly in activities other than those of banking, managing or controlling banks, or furnishing services to its subsidiary banks. However, among other permitted activities, a bank holding company may engage in and may own shares of companies engaged in, certain activities that the Federal Reserve has determined to be closely related to banking or managing and controlling banks, subject to certain notification requirements.

Limitations on Acquisitions of Company Common Stock. The Change in Bank Control Act prohibits a person or group of persons from acquiring "control" of a bank holding company unless the Federal Reserve has been notified and has not objected to the transaction. Under rebuttable presumptions of control established by the Federal Reserve, the acquisition of control of voting securities of a bank holding company constitutes an acquisition of control under the Change in Bank Control Act, requiring prior notice to the Federal Reserve, if, immediately after the transaction, the acquiring person (or persons acting in concert) will own, control, or hold with power to vote 10% or more of any class of voting securities of the bank holding company, and if either (i) the bank holding company has registered securities under Section 12 of the Securities Exchange Act of 1934, or (ii) no other person will own, control, or hold the power to vote a greater percentage of that class of voting securities immediately after the transaction.

In addition, the BHCA prohibits any company from acquiring control of a bank or bank holding company without first having obtained the approval of the Federal Reserve. Among other circumstances, under the BHCA, a company has control of a bank or bank holding company if the company owns, controls or holds with power to vote 25% or more of a class of voting securities of the bank or bank holding company; controls in any manner the election of a majority of directors or trustees of the bank or bank holding company; or the Federal Reserve has determined, after notice and opportunity for hearing, that the company has the power to exercise a controlling influence over the management or policies of the bank or bank holding company. The Federal Reserve has established presumptions of control under which the acquisition of control of 5% or more of a class of voting securities of a bank holding company, together with other factors enumerated by the Federal Reserve, could constitute the acquisition of control of a bank holding company for purposes of the BHCA.

Regulation of the Bank

General. The Bank is subject to regulation, supervision and examination by the FDIC, the Commissioner, and the RI Division of Banking. The FDIC, the Commissioner, and the RI Division of Banking have the authority to issue orders to banks under their supervision to cease and desist from unsafe or unsound banking practices and violations of laws, regulations, or conditions imposed by, agreements with, or commitments to, the Commissioner, the RI Division of Banking and the FDIC. The Commissioner, the RI Division of Banking and the FDIC are also empowered to assess civil money penalties against companies or individuals who violate banking laws, orders or regulations.

Deposit Insurance. Deposit obligations of the Bank are insured by the FDIC up to $250,000 per depositor. Deposit insurance premiums are based on assets. The FDIC calculates deposit insurance assessment rates for established small banks, generally those banks with less than $10 billion of assets that have been insured for at least five years, taking into account various measures, including an institution's leverage ratio, brokered deposit ratio, one-year asset growth, the ratio of net income before taxes to total assets, and considerations related to asset quality.

The FDIC has the authority to adjust deposit insurance assessment rates at any time. In addition, under the Federal Deposit Insurance Act ("FDIA"), the FDIC may terminate deposit insurance, among other circumstances, upon a finding that the institution has engaged in unsafe and 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. For 2022, the FDIC insurance expense for the Bank was $1.4 million.

Acquisitions and Branching. Prior approval from the Commissioner and the FDIC is required in order for the Bank to acquire another bank or establish a new branch office. Well capitalized and well managed banks may acquire other banks in any state, subject to certain deposit concentration limits and other conditions, pursuant to the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994, as amended by the Dodd-Frank Act. In addition, the Dodd-Frank Act authorizes a state-chartered bank, such as the Bank, to establish new branches on an interstate basis to the same extent a bank chartered by the host state may establish branches.

Activities and Investments of Insured State-Chartered Banks. The FDIA generally limits the types of equity investments an FDIC-insured state-chartered bank, such as the Bank, may make and the kinds of activities in which such a bank may engage, as a principal, to those that are permissible for national banks. Further, the Gramm-Leach-Bliley Act of 1999 (the "GLBA") permits state banks, to the extent permitted under state law, to engage via financial subsidiaries in certain activities that are permissible for subsidiaries of a financial holding company. In order to form a financial subsidiary, a state-chartered bank must be "well capitalized," and such banks must comply with certain capital deduction, risk management and affiliate transaction rules, among other requirements.

Brokered Deposits. The FDIA and FDIC regulations generally limit the ability of an insured depository institution to accept, renew or roll over any brokered deposit unless the institution's capital category is "well capitalized" or, with the FDIC's approval, "adequately capitalized." Depository institutions that have brokered deposits in excess of 10% of total assets are subject to increased FDIC deposit insurance premium assessments; however, for institutions that are "well capitalized" and have a CAMELS composite rating of 1 or 2, reciprocal deposits are deducted from brokered deposits. Section 202 of the Economic Growth, Regulatory Relief, and Consumer Protection Act (the "Economic Growth Act"), which was enacted in 2018, amended the FDIA to exempt a capped amount of reciprocal deposits from treatment as brokered deposits for certain insured depository institutions.

Community Reinvestment Act. The Community Reinvestment Act (the "CRA") requires the FDIC to evaluate the Bank's performance in helping to meet the credit needs of the entire communities it serves, including low- and moderate-income neighborhoods, consistent with its safe and sound banking operations, and to take this record into consideration when evaluating certain applications. The FDIC's CRA regulations are generally based upon objective criteria of the performance of institutions under three key assessment tests: (i) a lending test, to evaluate the institution's record of making loans in its service areas; (ii) an investment test, to evaluate the institution's record of investing in community development projects, affordable housing, and programs benefiting low- or moderate-income individuals and businesses; and (iii) a service test, to evaluate the institution's delivery of services through its branches, ATMs, and other offices. The Bank has achieved a rating of "Outstanding" on its most recent CRA examination. Massachusetts has also enacted a similar statute that requires the Commissioner to evaluate the performance of the Bank in helping to meet the credit needs of its entire community and to take that record into account in considering certain applications.

Lending Restrictions. Federal law limits a bank's authority to extend credit to directors and executive officers of the bank or its affiliates and persons or companies that own, control or have power to vote more than 10% of any class of securities of a bank or an affiliate of a bank, as well as to entities controlled by such persons. Among other things, extensions of credit to insiders are required to 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. The terms of such extensions of credit may not involve more than the normal risk of repayment or present other unfavorable features and may 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 the bank's capital.

Capital Adequacy and Safety and Soundness

Regulatory Capital Requirements. The Federal Reserve and the FDIC have issued substantially similar risk-based and leverage capital rules applicable to U.S. banking organizations such as the Company and the Bank. These rules are intended to reflect the relationship between the banking organization's capital and the degree of risk associated with its operations based on transactions recorded on-balance sheet as well as off-balance sheet items. The Federal Reserve and the FDIC may from time to time require that a banking organization maintain capital above the minimum levels discussed below, due to the banking organization's financial condition or actual or anticipated growth.

The capital adequacy rules define qualifying capital instruments and specify minimum amounts of capital as a percentage of assets that banking organizations are required to maintain. Common equity Tier 1 capital generally includes common stock and related surplus, retained earnings and, in certain cases and subject to certain limitations, minority interests in consolidated subsidiaries, less goodwill, other non-qualifying intangible assets and certain other deductions. Tier 1 capital for banks and bank holding companies generally consists of the sum of common equity Tier 1 capital, non-cumulative perpetual preferred stock, and related surplus and, in certain cases and subject to limitations, minority interests in consolidated subsidiaries that do not qualify as common equity Tier 1 capital, less certain deductions. Tier 2 capital generally consists of hybrid capital instruments, perpetual debt and mandatory convertible debt securities, cumulative perpetual preferred stock, term subordinated debt and intermediate-term preferred stock, and, subject to limitations, allowances for loan losses. The sum of Tier 1 and Tier 2 capital less certain required deductions represents qualifying total risk-based capital.

Under the capital rules, risk-based capital ratios are calculated by dividing common equity Tier 1 capital, Tier 1 capital, and total capital, respectively, by risk-weighted assets. Assets and off-balance sheet credit equivalents are assigned to one of several categories of risk weights based primarily on relative credit risk. The Tier 1 leverage ratio is calculated by dividing Tier 1 capital by average assets, less certain items such as goodwill and intangible assets, as permitted under the capital rules.

Under the Federal Reserve's rules that are applicable to the Company and the FDIC's capital rules applicable to the Bank, the Company and the Bank are each required to maintain a minimum common equity Tier 1 capital to risk-weighted assets ratio of 4.5%, a minimum Tier 1 capital to risk-weighted assets ratio of 6.0%, a minimum total capital to risk-weighted assets ratio of 8.0% and a minimum leverage ratio requirement of 4.0%. Additionally, these rules require an institution to establish a capital conservation buffer of common equity Tier 1 capital in an amount above the minimum risk-based capital requirements for "adequately capitalized" institutions of more than 2.5% of total risk weighted assets, or face restrictions on the ability to pay dividends, pay discretionary bonuses, and to engage in share repurchases.

Under the FDIC's prompt corrective action rules, an FDIC-supervised institution is considered well capitalized if it (i) has a total capital to risk-weighted assets ratio of 10.0% or greater; (ii) a Tier 1 capital to risk-weighted assets ratio of 8.0% or greater; (iii) a common Tier 1 equity ratio of 6.5% or greater, (iv) a leverage capital ratio of 5.0% or greater; and (v) is not subject to any written agreement, order, capital directive, or prompt corrective action directive to meet and maintain a specific capital level for any capital measure. The Bank is considered well capitalized under all regulatory definitions.

Generally, a bank, upon receiving notice that it is not adequately capitalized (*i.e.*, that it is "undercapitalized"), becomes subject to the prompt corrective action provisions of Section 38 of the FDIA that, for example, (i) restrict payment of capital distributions and management fees, (ii) require that its federal bank regulator monitor the condition of the institution and its efforts to restore its capital, (iii) require submission of a capital restoration plan, (iv) restrict the growth of the institution's assets and (v) require prior regulatory approval of certain expansion proposals. A bank that is required to submit a capital restoration plan must concurrently submit a performance guarantee by each company that controls the bank. A bank that is "critically undercapitalized" (*i.e.*, has a ratio of tangible equity to total assets that is equal to or less than 2.0%) will be subject to further restrictions, and generally will be placed in conservatorship or receivership within 90 days.

Current capital rules do not establish standards for determining whether a bank holding company is well capitalized. However, for purposes of processing regulatory applications and notices, the Federal Reserve's Regulation Y provides that a bank holding company is considered "well capitalized" if (i) on a consolidated basis, the bank holding company maintains a total risk-based capital ratio of 10.0% or greater; (ii) on a consolidated basis, the bank holding company maintains a Tier 1 risk-based capital ratio of 6.0% or greater; and (iii) the bank holding company is not subject to any written agreement, order, capital directive, or prompt corrective action directive issued by the Board of Directors to meet and maintain a specific capital level for any capital measure. A banking organization that qualifies for and elects to use the community bank leverage framework described below will be considered well capitalized as long as it is not subject to any written agreement, order, capital directive, or prompt corrective action directive issued by the Board of Directors to meet and maintain a specific capital level for any capital measure.

Safety and Soundness Standard. Guidelines adopted by the federal bank regulatory agencies pursuant to the FDIA establish general standards relating to internal controls and information systems, internal audit systems, loan documentation, credit underwriting, interest rate exposure, asset growth, asset quality, earnings, and compensation and benefits. In general, these guidelines require, among other things, appropriate systems and practices to identify and manage the risk and exposures specified in the guidelines. The guidelines prohibit excessive compensation as an unsafe and unsound practice and describe compensation as excessive when the amounts paid are unreasonable or disproportionate to the services performed by an executive officer, employee, director or principal shareholder. In addition, the federal banking agencies adopted regulations that authorize, but do not require, an agency to order an institution that has been given notice by an agency that it is not satisfying any of such safety and soundness standards to submit a compliance plan. If, after being so notified, an institution fails to submit an acceptable compliance plan or fails in any material respect to implement an acceptable compliance plan, the agency must issue an order restricting asset growth, requiring an institution to increase its ratio of tangible equity to assets or directing action to correct the deficiency and may issue an order directing other actions of the types to which an undercapitalized institution is subject under the "prompt corrective action" provisions of the FDIA. See "—Regulatory Capital Requirements" above. If an institution fails to comply with such an order, the agency may seek to enforce such order in judicial proceedings and to impose civil money penalties.

Dividend Restrictions

The Company is a legal entity separate and distinct from its subsidiaries. The revenue of the Company (on a parent-only basis) is derived primarily from dividends paid to it by the Bank and the Company's other subsidiaries. The right of the Company, and consequently the right of shareholders of the Company, to participate in any distribution of the assets or earnings of its subsidiaries through the payment of dividends or otherwise is subject to the prior claims of creditors of the subsidiaries, including, with respect to the Bank, depositors of the Bank, except to the extent that certain claims of the Company in a creditor capacity may be recognized.

Restrictions on Bank Holding Company Dividends. The Federal Reserve has the authority to prohibit bank holding companies from paying dividends if such payment is deemed to be an unsafe or unsound practice. The Federal Reserve has indicated generally that it may be an unsafe or unsound practice for bank holding companies to pay dividends unless the bank holding company's net income over the preceding year is sufficient to fund the dividends and the expected rate of earnings retention is consistent with the organization's capital needs, asset quality, and overall financial condition. Further, under the Federal Reserve's capital rules, the Company's ability to pay dividends is restricted if it does not maintain capital above the capital conservation buffer. See "—Capital Adequacy and Safety and Soundness—Regulatory Capital Requirements" above.

Restrictions on Bank Dividends. The FDIC has the authority to use its enforcement powers to prohibit a bank from paying dividends if, in its opinion, the payment of dividends would constitute an unsafe or unsound practice. Federal law also prohibits the payment of dividends by a bank that will result in the bank failing to meet its applicable capital requirements on a pro forma basis. The payment of dividends by a bank is also restricted pursuant to various state regulatory limitations.

Certain Transactions by Bank Holding Companies with their Affiliates

There are various statutory restrictions on the extent to which bank holding companies and their non-bank subsidiaries may borrow, obtain credit from or otherwise engage in "covered transactions" with their insured depository institution subsidiaries. An insured depository institution (and its subsidiaries) may not lend money to, or engage in covered transactions with, its non-depository institution affiliates if the aggregate amount of covered transactions outstanding involving the bank, plus the proposed transaction exceeds the following limits: (i) in the case of any one such affiliate, the aggregate amount of covered transactions of the insured depository institution and its subsidiaries cannot exceed 10% of the capital stock and surplus of the insured depository institution; and (ii) in the case of all affiliates, the aggregate amount of covered transactions of the insured depository institution and its subsidiaries cannot exceed 20% of the capital stock and surplus of the insured depository institution. For this purpose, "covered transactions" are defined by statute to include a loan or extension of credit to an affiliate; a purchase of or investment in securities issued by an affiliate; a purchase of assets from an affiliate unless exempted by the Federal Reserve; the acceptance of securities issued by an affiliate as collateral for a loan or extension of credit to any person or company; the issuance of a guarantee, acceptance or letter of credit on behalf of an affiliate; securities borrowing or lending transactions with an affiliate that creates a credit exposure to such affiliate; or a derivatives transaction with an affiliate that creates a credit exposure to such affiliate. Covered transactions are also subject to certain collateral security requirements. Covered transactions as well as other types of transactions between a bank and a bank holding company must be conducted under terms and conditions, including credit standards, which are at least as favorable to the bank as prevailing market terms. If a banking organization elects to use the community bank leverage ratio framework described in "Capital Adequacy and Safety and Soundness-Regulatory Capital Requirements" above, the banking organization would be required to measure the amount of covered transactions as a percentage of Tier 1 capital, subject to certain adjustments. Moreover, Section 106 of the Bank Holding Company Act Amendments of 1970 provides that, to further competition, a bank holding company and its subsidiaries are prohibited from engaging in certain tying arrangements in connection with any extension of credit, lease or sale of property of any kind, or the furnishing of any service.

Consumer Protection Regulation

The Company and the Bank are subject to federal and state laws designed to protect consumers and prohibit unfair, deceptive or abusive business practices, including the Equal Credit Opportunity Act, Fair Housing Act, Home Ownership Protection Act, Fair Credit Reporting Act, as amended by the Fair and Accurate Credit Transactions Act of 2003 (the "FACT Act"), the GLBA, the Truth in Lending Act ("TILA"), the CRA, the Home Mortgage Disclosure Act, the Real Estate Settlement Procedures Act, the National Flood Insurance Act, and various state law counterparts. These laws and regulations mandate certain disclosure requirements and regulate the manner in which financial institutions must interact with clients when taking deposits, making loans, collecting loans, and providing other services. Further, the CFPB also has a broad mandate to prohibit unfair or deceptive acts and practices and is specifically empowered to require certain disclosures to consumers and draft model disclosure forms. Failure to comply with consumer protection laws and regulations can subject financial institutions to enforcement actions, fines and other penalties. The FDIC examines the Bank for compliance with CFPB rules and enforces CFPB rules with respect to the Bank.

The Dodd-Frank Act prescribes certain standards that mortgage lenders must consider before making a residential mortgage loan, including verifying a borrower's ability to repay such mortgage loan, and allows borrowers to assert violations of certain provisions of TILA as a defense to foreclosure proceedings. Additionally, the CFPB's qualified mortgage rule requires creditors, such as the Bank, to make a reasonable, good faith determination of a consumer's ability to repay any consumer credit transaction secured by a dwelling prior to making the loan. The Economic Growth Act included provisions that ease certain requirements related to mortgage transactions for certain institutions with less than $10 billion in total consolidated assets.

Privacy and Customer Information Security. The GLBA requires financial institutions to implement policies and procedures regarding the disclosure of nonpublic personal information about consumers to nonaffiliated third parties. In general, the Bank must provide its clients with an initial and annual disclosure that explains its policies and procedures regarding the disclosure of such nonpublic personal information, and, except as otherwise required or permitted by law, the Bank is prohibited from disclosing such information unless otherwise provided in such policies and procedures. However, an annual disclosure is not required to be provided by a financial institution if the financial institution only discloses information under exceptions from GLBA that do not require an opt-out to be provided and if there has been no change in its privacy policies and procedures since its most recent disclosure provided to consumers. The GLBA also requires that the Bank develop, implement and maintain a comprehensive written information security program designed to ensure the security and confidentiality of client information (as defined under GLBA), to protect against anticipated threats or hazards to the security or integrity of such information and to protect against unauthorized access to or use of such information that could result in substantial harm or inconvenience to any client. The Bank is also required to send a notice to clients whose "sensitive information" has been compromised if unauthorized use of the information is "reasonably possible." All fifty states, as well as the District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands, have enacted legislation concerning breaches of data security and the duties of the Bank in response to a data breach. In addition, individual states in our market area have promulgated data security regulations with respect to personal information of their residents. Pursuant to the FACT Act, the Bank has developed and implemented a written identity theft prevention program to detect, prevent, and mitigate identity theft in connection with the opening of certain accounts or certain existing accounts. Additionally, the FACT Act amended the Fair Credit Reporting Act to generally prohibit a person from using information received from an affiliate to make a solicitation for marketing purposes to a consumer, unless the consumer is given notice and a reasonable opportunity and a reasonable and method to opt out of the making of such solicitations.

Anti-Money Laundering

The Bank Secrecy Act. Under the Bank Secrecy Act ("BSA"), a financial institution is required to have systems in place to detect certain transactions, based on the size and nature of the transaction. Financial institutions are generally required to report to the U.S. Treasury any cash transactions involving more than $10,000. In addition, financial institutions are required to file suspicious activity reports for any transaction or series of transactions that involve at least $5,000 and which the financial institution knows, suspects or has reason to suspect involves illegal funds, is designed to evade the requirements of the BSA or has no lawful purpose. The Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, or the "USA PATRIOT Act," which amended the BSA, together with the implementing regulations of various federal regulatory agencies, has caused financial institutions, such as the Bank, to adopt and implement additional policies or amend existing policies and procedures with respect to, among other things, anti-money laundering compliance, suspicious activity, currency transaction reporting, customer identity verification and customer risk analysis. In evaluating an application to acquire a bank or to merge banks or effect a purchase of assets and assumption of deposits and other liabilities, the applicable federal banking regulator must consider the anti-money laundering compliance record of both the applicant and the target. In addition, under the USA PATRIOT Act, financial institutions are required to take steps to monitor their correspondent banking and private banking relationships as well as, if applicable, their relationships with "shell banks."

OFAC. The U.S. has imposed economic sanctions that affect transactions with designated foreign countries, nationals and others. These sanctions, which are administered by the U.S. Treasury's Office of Foreign Assets Control, or "OFAC," take many different forms. Generally, however, they contain one or more of the following elements: (i) restrictions on trade with or investment in a sanctioned country, including prohibitions against direct or indirect imports from and exports to a sanctioned country and prohibitions on "U.S. persons" engaging in financial or other transactions relating to a sanctioned country, or with certain designated persons and entities; (ii) a blocking of assets in which the government or specially designated nationals of the sanctioned country have an interest, by prohibiting transfers of property subject to U.S. jurisdiction (including property in the possession or control of U.S. persons); and (iii) restrictions on certain transactions with or involving certain persons or entities. Blocked assets (for example, property and bank deposits) cannot be paid out, withdrawn, set off, or transferred in any manner without a license from OFAC. Failure to comply with these sanctions could have serious legal and reputational consequences the Company.

ITEM 1A. RISK FACTORS

Before deciding to invest in us or deciding to maintain or increase your investment, you should carefully consider the risks described below, in addition to the other information contained in this report and in our other filings with the SEC. The risks and uncertainties described below and in our other filings are not the only ones facing us. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business. If any of these known or unknown risks or uncertainties actually occur, our business, financial condition and results of operations could be seriously harmed. In that event, the market price for our common stock could decline and you may lose some or all of your investment.

RISKS RELATED TO OUR BUSINESS AND INDUSTRY

The possibility of the economy's return to recessionary conditions and the possibility of further turmoil or volatility in the financial markets would likely have an adverse effect on our business, financial position, and results of operations.

The economy in the United States and globally has experienced volatility in recent years and may continue to experience such volatility for the foreseeable future. There can be no assurance that economic conditions will not worsen. Unfavorable or uncertain economic conditions can be caused by declines in economic growth, business activity, or investor or business confidence, limitations on the availability or increases in the cost of credit and capital, increases in inflation or interest rates, the timing and impact of changing governmental policies, natural disasters, climate change, epidemics, the COVID-19 pandemic and future pandemics, terrorist attacks, acts of war, or a combination of these or other factors. A worsening of business and economic conditions could have adverse effects on our business, including the following:

- investors may have less confidence in the equity markets in general and in financial services industry stocks in particular, which could place downward pressure on our stock price and resulting market valuation;
- economic and market developments may further affect consumer and business confidence levels and may cause declines in credit usage and adverse changes in payment patterns, causing increases in delinquencies and default rates;
- our ability to assess the creditworthiness of our customers may be impaired if the models and approaches we use to select, manage, and underwrite loans become less predictive of future behaviors;
- we could suffer decreases in demand for loans or other financial products and services or decreased deposits or other investments in accounts with us;
- competition in the financial services industry could intensify as a result of the increasing consolidation of financial services companies in connection with current market conditions or otherwise; and
- the value of loans and other assets or collateral securing loans may decrease.

Changes in interest rates may hurt our results of operations and financial condition.

Like other financial institutions, we are subject to interest rate risk. Our primary source of income is net interest income, which is the difference between interest earned on loans and investments and interest paid on deposits and borrowings. Changes in the general level of interest rates can affect our net interest income by affecting the difference between the weighted-average yield earned on our interest-earning assets and the weighted-average rate paid on our interest-bearing liabilities, or interest rate spread, and the average life of our interest-earning assets and interest-bearing liabilities. Interest rates are highly sensitive to many factors, including government monetary policies, inflation, domestic and international economic and political conditions. Conditions such as inflation, deflation, recession, unemployment, money supply, and other factors beyond our control may also affect interest rates.

While we pursue an asset/liability strategy designed to mitigate our risk from changes in interest rates, changes in interest rates may still have a material adverse effect on our financial condition and results of operations. Changes in the level of interest rates also may negatively affect our ability to originate and sell 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.

Inflationary pressures and rising prices may affect our results of operations and financial condition.

Inflation rose sharply at the end of 2021 and throughout 2022. Inflationary pressures are currently expected to remain elevated throughout 2023. Small to medium-sized businesses may be impacted more during periods of high inflation, as they are not able to leverage economics of scale to mitigate cost pressures compared to larger businesses. Consequently, the ability of our business customers to repay their loans may deteriorate, and in some cases this deterioration may occur quickly, which would adversely impact our results of operations and financial condition. Furthermore, a prolonged period of inflation could cause wages and other costs to increase, which could adversely affect our results of operations and financial condition.

Commercial real estate and commercial loans carry greater credit risk than loans secured by owner-occupied one- to four-family real estate.

We intend to continue our focus on prudently growing our commercial real estate and commercial loan portfolio. At December 31, 2022, our commercial real estate loan portfolio was $2.25 billion, or 49.5% of total loans, and our commercial and industrial loan portfolio was $424.3 million, or 9.3% of total loans. Given their larger balances and the complexity of the underlying collateral, commercial real estate and commercial loans generally expose a lender to greater credit risk than loans secured by owner-occupied one- to four-family real estate. Also, many of our borrowers or related groups of borrowers have more than one of these types of loans outstanding. Consequently, an adverse development with respect to one loan or one credit relationship can 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. 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 credit losses on loans which would in turn adversely affect our operating results and financial condition. Further, if we foreclose on the collateral, our holding period for the collateral may be longer than for one- to four-family real estate loans because there are fewer potential purchasers of the collateral, which can result in substantial holding costs.

The unseasoned nature of our commercial real estate and commercial loan portfolio may result in changes to our estimates of collectability, which may lead to additional provisions or charge-offs, which could hurt our profits.

Our commercial real estate loan portfolio increased to $2.25 billion at December 31, 2022 from $1.70 billion at December 31, 2021 and $1.55 billion at December 31, 2020, and our commercial and industrial loan portfolio was $424.3 million at December 31, 2022, $421.6 million at December 31, 2021 and $464.4 million at December 31, 2020. A large portion of our commercial real estate and commercial and industrial loan portfolio is unseasoned and does not provide us with a significant payment or charge-off history pattern from which to judge future collectability. Currently we estimate potential charge-offs using peer data adjusted for qualitative factors specific to us. As a result, it may be difficult to predict the future performance of this part of our loan portfolio. These loans may have delinquency or charge-off levels above our historical experience or current estimates, which could adversely affect our future performance. Further, these types of loans generally have larger balances and involve a greater risk than one- to four-family residential mortgage loans. Accordingly, if we make any errors in judgment in the collectability of our commercial or commercial real estate loans, any resulting charge-offs may be larger on a per loan basis than those incurred historically with our residential mortgage loan or consumer loan portfolios.

Our commercial and residential construction loans are subject to various lending risks depending on the nature of the borrower's business, its cash flow and our collateral.

At December 31, 2022, our commercial construction loan portfolio was $199.3 million, or 4.4% of total loans, and our residential construction loan portfolio consisted of $35.8 million, or 0.8% of total loans. Our construction loans are based upon estimates of costs to construct and the value associated with the completed project. These estimates may be inaccurate due to the uncertainties inherent in estimating construction costs, as well as the market value of the completed project, making it relatively difficult to accurately evaluate the total funds required to complete a project and the related loan-to-value ratio. As a result, construction loans often involve the disbursement of substantial funds with repayment dependent, in part, on the success of the ultimate project and the ability of the borrower to sell or lease the property, rather than the ability of the borrower or guarantor to repay principal and interest. Delays in completing the project may arise from labor problems, material shortages and other unpredictable contingencies. If the estimate of construction costs is inaccurate, we may be required to advance additional funds to complete construction. If our appraisal of the value of the completed project proves to be overstated, we may have inadequate security for the repayment of the loan upon completion of construction of the project.

Environmental liability associated with commercial lending could result in losses.

In the course of business, we may acquire, through foreclosure or other similar proceedings, properties securing loans we have originated that are in default. Particularly in commercial real estate lending, there is a risk that material environmental violations could be discovered at these properties. In this event, we might be required to remedy these violations at the affected properties at our sole cost and expense. The cost of this remedial action could substantially exceed the value of affected properties. We may not have adequate remedies against the prior owner or other responsible parties and could find it difficult or impossible to sell the affected properties as a result of their condition. These events could have an adverse effect on our business, results of operations and financial condition.

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

At December 31, 2022, total residential real estate loans were $1.63 billion, or 35.9% of total loans. Residential mortgage lending, whether owner-occupied or non-owner-occupied, is generally sensitive to regional and local economic conditions that significantly impact the ability of borrowers to meet their loan payment obligations. Declines in real estate values could cause some of our residential mortgages to be inadequately collateralized, which would expose us to a greater risk of loss if we seek to recover on defaulted loans by selling the real estate collateral. Residential loans with combined higher loan-to-value ratios are more sensitive to declining property values than those with lower combined loan-to-value ratios and therefore may experience a higher incidence of default and severity of losses. In addition, if the borrowers sell their homes, they may be unable to repay their loans in full from the sale proceeds. For those home equity loans and lines of credit secured by a second mortgage, it is unlikely that we will be successful in recovering all or a portion of our loan proceeds in the event of default unless we are prepared to repay the first mortgage loan and such repayment and the costs associated with a foreclosure are justified by the value of the property. For these reasons, we may experience higher rates of delinquencies, defaults and losses on our home equity loans.

The geographic concentration of our loan portfolio and lending activities makes us vulnerable to a downturn in the local economy.

While there is not a single employer or industry in our market area on which a significant number of our customers are dependent, a substantial portion of our loan portfolio is composed of loans secured by property located in the greater Boston metropolitan area and, to a lesser extent, the greater Providence metropolitan area. This makes us vulnerable to a downturn in the local economy and real estate markets. Adverse conditions in the local economy such as unemployment, recession, a catastrophic event or other factors beyond our control could impact the ability of our borrowers to repay their loans, which could impact our net interest income, level of non-performing loans, and the allowance for credit losses on loans. Decreases in local real estate values caused by economic conditions or other events could adversely affect the value of the property used as collateral for our loans, which could cause us to realize a loss in the event of a foreclosure. For more information about our market area, see "—*Market Area*" and "—*Competition*."

Interest rate increases in the secondary mortgage market may reduce our mortgage banking revenues, which would negatively impact our non-interest income.

We sell residential mortgage loans in the secondary market, which provides a significant portion of our non-interest income. We generate mortgage banking revenues primarily from gains on the sale of mortgage loans to investors on servicing-released and servicing-retained bases. We also earn interest on loans held for sale while they are awaiting delivery to our investors. As a result of the current higher interest rate environment, our originations of mortgage loans may decrease, resulting in fewer loans that are available to be sold to investors. This would result in a decrease in mortgage banking revenues. In addition, to being affected by interest rates, the secondary mortgage markets are also subject to investor demand for single-family mortgage loans and potentially increased investor yield requirements for those loans. These conditions may fluctuate or even worsen in the future or during a prolonged period of secondary market illiquidity. We believe our ability to retain mortgage loans at the levels generated by the mortgage division is limited. Furthermore, our results of operations are affected by the amount of non-interest expenses associated with mortgage banking activities, such as salaries and employee benefits, occupancy, equipment and data processing expense and other operating costs. During periods of reduced loan demand, our results of operations may be adversely affected to the extent that we are unable to reduce expenses commensurate with the decline in mortgage loan origination activity.

We use significant assumptions and estimates in our financial models to determine the fair value of certain assets, including mortgage servicing rights, origination commitments and loans held for sale. If our assumptions or estimates are incorrect, that may have a negative impact on the fair value of such assets and adversely affect our earnings.

We use internal and third-party financial models that utilize market data to value certain assets, including mortgage servicing rights when they are initially acquired and on a quarterly basis thereafter. The methodology used to estimate these values is complex and uses asset-specific collateral data and market inputs for interest, discount rates and liquidity dates. Valuations are highly dependent upon the reasonableness of our assumptions and the predictability of the relationships that drive the results of our valuation methodologies. If prepayment speeds increase more than estimated, or if delinquency or default levels are higher than anticipated, we may be required to write down the value of certain assets, which could adversely affect our earnings. Prepayment speeds are significantly impacted by fluctuations in interest rates and are therefore difficult to predict. During periods of declining interest rates, prepayment speeds increase, resulting in a decrease in the fair value of the mortgage servicing rights. In addition, there can be no assurance that, even if our models are correct, these assets could be sold for our carrying value should we choose or be forced to sell them in the open market.

If we are required to repurchase mortgage loans that we have previously sold, it could negatively affect our earnings.

In connection with selling residential mortgage loans in the secondary market, our agreements with investors contain standard representations and warranties and early payment default clauses that could require us to repurchase mortgage loans sold to these investors or reimburse the investors for losses incurred on loans in the event of borrower default within a defined period after origination or, in the event of breaches of contractual representations or warranties made at the time of sale that are not remedied within a defined period after we receive notice of such breaches, or to refund the profit received from the sale of a loan to an investor if the borrower pays off the loan within a defined period after origination. If we are required to repurchase mortgage loans, to refund profits, or to provide indemnification or other recourse in excess of our recourse reserve, this could significantly increase our costs and thereby affect our future earnings. The recourse reserve at December 31, 2022 is $3.6 million.

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

At December 31, 2022, our allowance for credit losses on loans was $45.2 million, or 0.99% of total loans. At December 31, 2021, our allowance for loan losses was $45.4 million, or 1.26% of total loans, compared to $55.4 million, or 1.59% at December 31, 2020. We make various assumptions and judgments about the collectability of our loan portfolio, including the creditworthiness of our borrowers and the value of the real estate and other assets serving as collateral for many of our loans. In determining the amount of the allowance for credit losses on loans, we review our loans, loss and delinquency experience, and commercial and commercial real estate peer data and we evaluate other factors including, among other things, current economic conditions. If our assumptions are incorrect, or if delinquencies or non-performing loans increase, our allowance for credit losses on loans may not be sufficient to cover losses inherent in our loan portfolio, which would require additions to our allowance, which could materially decrease our net income.

In addition, our regulators, as an integral part of their examination process, periodically review the allowance for credit losses on loans and may require us to increase the allowance for credit losses on loans by recognizing additional provisions for loan losses charged to income, or to charge-off loans, which, net of any recoveries, would decrease the allowance for credit losses on loans. Any such additional provisions for credit losses or charge-offs could have a material adverse effect on our financial condition and results of operations.

A portion of our loan portfolio consists of loan participations, which may have a higher risk of loss than loans we originate because we are not the lead lender and we have limited control over credit monitoring.

We occasionally purchase loan participations. Although we underwrite these loan participations consistent with our general underwriting criteria, loan participations may have a higher risk of loss than loans we originate because we rely on the lead lender to monitor the performance of the loan. Moreover, our decisions regarding the classification of a loan participation and loan loss provisions associated with a loan participation are made in part based upon information provided by the lead lender. A lead lender also may not monitor a participation loan in the same manner as we would for loans that we originate. At December 31, 2022, we held loan participation interests in commercial real estate, commercial, and commercial construction loans totaling $410.3 million.

Hedging against interest rate exposure may adversely affect our earnings.

We employ techniques that limit, or "hedge," the adverse effects of rising interest rates on our loans held for sale, originated interest-rate locks, our mortgage servicing asset and our borrowings. Our hedging activity varies based on the level and volatility of interest rates and other changing market conditions. These techniques may include purchasing or selling futures contracts, purchasing put and call options on securities or securities underlying futures contracts, asset liability management, or entering into other mortgage-backed derivatives. There are, however, no perfect hedging strategies, and interest rate hedging may fail to protect us from loss. Moreover, hedging activities could result in losses if the event against which we hedge does not occur. Additionally, interest rate hedging could fail to protect us or adversely affect us because, among other things:

- Available interest rate hedging may not correspond directly with the interest rate risk for which protection is sought;
- The duration of the hedge may not match the duration of the related liability;
- The party owing money in the hedging transaction may default on its obligation to pay;
- The credit quality of the party owing money on the hedge may be downgraded to such an extent that it impairs our ability to sell or assign our side of the hedging transaction;
- The value of derivatives used for hedging may be adjusted from time to time in accordance with accounting rules to reflect changes in fair value; and/or
- Downward adjustments, or "mark-to-market losses," would reduce our stockholders' equity.

We may be unable to attract, hire and retain qualified key employees, which could adversely affect our business prospects, including our competitive position and results of operations.

Our success is dependent upon our ability to attract, hire and retain highly skilled individuals. There is significant competition for those individuals with the experience and skills required to conduct many of our business activities. We may not be able to hire or retain the key personnel that we depend upon for our success. The unexpected loss of services of one or more of these or other key personnel could have a material adverse impact or our business because of their skills, knowledge or the markets in which we operate, years of industry experience and the difficulty of promptly finding qualified replacement personnel.

We may not be able to successfully implement our strategic plan.

Our growth is essential to improving our profitability, and we expect to continue to incur expenses related to the implementation of our strategic plan, including hiring initiatives and the opening of new branches. We may not be able to successfully implement our strategic plan, or do so in the timeframe that we expect, and therefore may not be able to increase profitability in the timeframe that we expect or at all, and could experience a decrease in profitability.

The successful implementation of our strategic plan will require, among other things that we attract new customers that currently bank at other financial institutions in our market area or adjacent markets. In addition, our ability to successfully grow will depend on several factors, including continued favorable market conditions, the competitive responses from other financial institutions in our market area, our ability to attract and retain experienced lenders, and our ability to maintain high asset quality as we increase our loan portfolio. While we believe we have the management resources and internal systems in place to successfully manage our future growth, growth opportunities may not be available and we may not be successful in implementing our business strategy. Further, it will take time to implement our business strategy, especially for our lenders to originate enough loans and for our branch network to attract enough favorably priced deposits to generate the revenue needed to offset the associated expenses. Our strategic plan, even if successfully implemented, may not ultimately produce positive results.

Impairment of goodwill and/or intangible assets could require a charge to earnings, which could adversely affect us.

When the purchase price of an acquired business exceeds the fair value of its tangible assets, the excess is allocated to goodwill and other identifiable intangible assets. The amount of the purchase price that is allocated to goodwill is determined by the excess of the purchase price over the net identifiable assets acquired. At December 31, 2022, we had goodwill and other intangible assets of $72.0

million, consisting of $10.8 million of goodwill primarily in connection with the acquisition of HarborOne Mortgage in 2015, and $59.0 million of goodwill and $2.3 million in core deposit intangibles in connection with the acquisition of Coastway Bancorp, Inc. ("Coastway") in 2018. Under current accounting standards, if we determine goodwill or intangible assets are impaired, we will be required to write down the value of these assets. We may be required to take impairment charges in the future, which would have a negative effect on our shareholders' equity and financial results.

An increase in FDIC insurance assessments could significantly increase our expenses.

The Dodd-Frank Act eliminated the maximum Deposit Insurance Fund ratio of 1.5% of estimated deposits, and the FDIC has established a long-term ratio of 2.0%. The FDIC has the authority to increase assessments in order to maintain the Deposit Insurance Fund ratio at particular levels. In addition, if our regulators issue downgraded ratings of the Bank in connection with their examinations, the FDIC could impose significant additional fees and assessments on us. Increases in assessments by the FDIC could significantly increase our expenses.

The loss of deposits or a change in deposit mix could increase our cost of funding.

Our deposits are a low-cost and stable source of funding. We compete with banks and other financial institutions for deposits. Funding costs may increase if we lose deposits and are forced to replace them with more expensive sources of funding, such as the FHLB, if clients shift their deposits into higher cost products or if we need to raise interest rates to avoid losing deposits. Higher funding costs could reduce our net interest margin, net interest income, and net income.

Our funding sources may prove insufficient to allow us to satisfy our liquidity requirements, meet our obligations, or support future growth.

We must maintain sufficient funds to respond to the needs of depositors and borrowers. Liquidity is also required to fund various obligations, including credit commitments to borrowers, mortgage and other loan originations, withdrawals by depositors, repayment of borrowings, and operating expenses and capital improvements. To manage liquidity, we draw upon a number of funding sources in addition to core deposit growth and repayments and maturities of loans and investments. These sources include FHLB advances and proceeds from the sale of investments and loans. Our ability to manage liquidity will be severely constrained if we are unable to maintain our access to funding or if adequate financing is not available to accommodate future growth at acceptable costs. In addition, if we are required to rely more heavily on more expensive funding sources to support future growth, our revenues may not increase proportionately to cover our costs. In that case, our operating margins and profitability would be adversely affected.

Strong competition within our market area could hurt our profits and slow growth.

We face intense competition in making loans and attracting deposits. Price competition for loans and deposits sometimes results in us charging lower interest rates on our loans and paying higher interest rates on our deposits and may reduce our net interest income. Competition also makes it more difficult and costly to attract and retain qualified employees. Many of the institutions with which we compete have substantially greater resources and lending limits than we have and may offer services that we do not provide. We expect competition to increase in the future as a result of legislative, regulatory and technological changes and the continuing trend of consolidation in the financial services industry. If we are not able to effectively compete in our market area, our profitability may be negatively affected. The greater resources and broader offering of deposit and loan products of some of our competitors may also limit our ability to increase our interest-earning assets or deposits.

Our business may be adversely affected if we fail to adapt our products and services to evolving industry standards and consumer preferences.

The financial services industry is undergoing rapid technological changes with frequent introductions of new technology-driven products and services. The widespread adoption of new technologies, including, cryptocurrencies and payment systems, could require substantial expenditures to modify or adapt our existing products and services. We might not be successful in developing or introducing new or modified products and services, integrating new products or services into our existing offerings, responding or adapting to changes in consumer behavior, preferences, spending, investing and/or saving habits, achieving market acceptance of our products and services, reducing costs in response to pressures to deliver products and services at lower prices or sufficiently developing and maintaining loyal customers.

Development of new products and services may impose additional costs on us and may expose us to increased operational risk.

The introduction of new products and services can entail significant time and resources, including regulatory approvals. Substantial risks and uncertainties are associated with the introduction of new products and services, including technical and control requirements that may need to be developed and implemented, rapid technological change in the industry, our ability to access technical and other information from its clients, the significant and ongoing investments required to bring new products and services to market in a timely manner at competitive prices and the preparation of marketing, sales and other materials that fully and accurately describe the product or service and its underlying risks. Our failure to manage these risks and uncertainties also exposes it to enhanced risk of operational lapses which may result in the recognition of financial statement liabilities. Regulatory and internal control requirements, capital requirements, competitive alternatives, vendor relationships and shifting market preferences may also determine if such initiatives can be brought to market in a manner that is timely and attractive to our clients. Products and services relying on internet and mobile technologies may expose us to fraud and cybersecurity risks. Failure to successfully manage these risks in the development and implementation of new products or services could have a material adverse effect on our business and reputation, as well as on its consolidated results of operations and financial condition.

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

We are a community bank, and our reputation is one of the most valuable components of our business. A key component of our business strategy is to rely on our reputation for customer service and knowledge of local markets to expand our presence by capturing new business opportunities from existing and prospective customers in our market area. As a community bank, 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 and associates. 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 by events beyond our control, our business and operating results may be adversely affected.

The proliferation of social media websites utilized by us and other third parties, as well as the personal use of social media by our employees and others, including personal blogs and social network profiles, also may increase the risk that negative, inappropriate or unauthorized information may be posted or released publicly that could harm our reputation or have other negative consequences, including as a result of our employees interacting with our customers in an unauthorized manner in various social media outlets. Any damage to our reputation could affect our ability to retain and develop the business relationships necessary to conduct business, which in turn could negatively impact our financial condition, results of operations, and the market price of our common stock.

Changes in the valuation of our securities could adversely affect us.

Most of the securities in our portfolio are classified as available-for-sale. Accordingly, a decline in the fair value of our securities could cause a material decline in our reported equity and/or net income. At least quarterly, and more frequently when warranted by economic or market conditions, Management evaluates all securities classified as available-for-sale with a fair value below the amortized cost of the investment. Securities that we do not have the ability or intent to hold until recovery to its amortized cost is written down to fair value through a provision for credit losses. Debt securities that we have the intent and ability to hold are evaluated to determine whether the decline in fair value has resulted from credit losses or other factors. If credit loss exists based on the results of the evaluation, an allowance for credit losses is recorded. Any impairment that has not been recorded through an allowance for credit losses is considered market-related and is recognized in other comprehensive income.

Uncertainty about the future of LIBOR may adversely affect our business.

The Company has certain loans, investment securities and debt obligations whose interest rate is indexed to LIBOR. LIBOR has been used extensively in the United States as a benchmark for various commercial and financial contracts, including funding sources, adjustable-rate mortgages, corporate debt, interest rate swaps and other derivatives. LIBOR is set based on interest rate information reported by certain banks, which will stop reporting such information after June 30, 2023. Other benchmarks may perform differently than LIBOR or may have other consequences that cannot currently be anticipated. It is also uncertain what will happen with instruments that rely on LIBOR for future interest rate adjustments and which of those instruments may remain outstanding or be renegotiated if LIBOR ceases to exist. The transition from LIBOR to another benchmark rate or rates, such as the Secured Overnight Financing Rate

("SOFR") could have adverse impacts on our funding costs or net interest margins, as well as any floating-rate obligations, loans, deposits, derivatives, and other financial instruments that currently use LIBOR as a benchmark rate and, ultimately, adversely affect our financial condition and results of operations.

We may need to raise additional capital in the future, but that capital may not be available when it is needed, or the cost of that capital may be very high.

We are required by our regulators to maintain adequate levels of capital to support our operations, which may result in our need to raise additional capital to support continued growth. Our ability to raise additional capital, if needed, will depend on conditions in the capital markets at that time, which are outside our control, and on our financial condition and performance. Accordingly, we may not be able to raise additional capital if needed on terms that are acceptable to us, or at all. If we cannot raise additional capital when needed, our operations could be materially impaired and our financial condition and liquidity could be materially and adversely affected. In addition, if we are unable to raise additional capital when required by the Commissioner or the Federal Reserve, we may be subject to adverse regulatory action.

If we raise capital through the issuance of additional of common stock or other securities, it will dilute the ownership interests of existing shareholder and may dilute the per share value of our common stock. New investors may also have rights, preferences and privileges senior to our current shareholders.

We face continuing and growing security risks to our information base, including the information we maintain relating to our customers.

We are subject to certain operational risks, including, but not limited to, data processing system failures and errors, inadequate or failed internal processes, customer or employee fraud and catastrophic failures resulting from terrorist acts or natural disasters. In the ordinary course of business, we rely on electronic communications and information systems to conduct our business and to store sensitive data, including financial information regarding customers. Our electronic communications and information systems infrastructure could be susceptible to cyberattacks, hacking, identity theft or terrorist activity. We have implemented and regularly review and update extensive systems of internal controls and procedures as well as corporate governance policies and procedures intended to protect our business operations, including the security and privacy of all confidential customer information. In addition, we rely on the services of a variety of vendors to meet our data processing and communication needs. No matter how well designed or implemented our controls are, we cannot provide an absolute guarantee to protect our business operations from every type of problem in every situation. A failure or circumvention of these controls could have a material adverse effect on our business operations and financial condition.

We regularly assess and test our security systems and disaster preparedness, including back-up systems, but the risks are substantially escalating. As a result, cybersecurity and the continued enhancement of our controls and processes to protect our systems, data and networks from attacks, unauthorized access or significant damage remain a priority. The cost of insuring against cybersecurity risk may increase, and we may be required to expend additional resources to enhance our protective measures or to investigate and remediate any information security vulnerabilities or exposures. Any breach of our system security could result in disruption of our operations, unauthorized access to confidential customer information, significant regulatory costs, litigation exposure and other possible damages, loss or liability and such a breach could negatively impact customer confidence, damaging our reputation and undermining our ability to attract and keep customers.

We may not be able to successfully implement future information technology system enhancements, which could adversely affect our business operations and profitability.

We invest significant resources in information technology system enhancements in order to provide functionality and security at an appropriate level. We may not be able to successfully implement and integrate future system enhancements, which could adversely impact the ability to provide timely and accurate financial information in compliance with legal and regulatory requirements, which could result in sanctions from regulatory authorities. Such sanctions could include fines and suspension of trading in our stock, among others. In addition, future system enhancements could have higher than expected costs and/or result in operating inefficiencies, which could increase the costs associated with the implementation as well as ongoing operations.

Failure to properly utilize system enhancements that are implemented in the future could result in impairment charges that adversely impact our financial condition and results of operations and could result in significant costs to remediate or replace the defective components. In addition, we may incur significant training, licensing, maintenance, consulting and amortization expenses during and after systems implementations, and any such costs may continue for an extended period of time.

We rely on other companies to provide key components of our business infrastructure.

Third-party vendors provide key components of our business infrastructure such as internet connections, network access and core application processing. While we have selected these third-party vendors carefully, we do not control them or their actions. Any problems caused by these third parties, including as a result of their not providing us their services for any reason or their performing their services poorly, could adversely affect our ability to deliver products and services to our customers or otherwise conduct our business efficiently and effectively. Replacing these third-party vendors could also entail significant delay and expense.

If our risk management framework does not effectively identify or mitigate our risks, we could suffer losses.

Our risk management framework seeks to mitigate risk and appropriately balance risk and return. We have established processes and procedures intended to identify, measure, monitor and report the types of risk to which we are subject, including credit risk, operations risk, compliance risk, reputation risk, strategic risk, market risk, and liquidity risk. We seek to monitor and control our risk exposure through a framework of policies, procedures and reporting requirements. Management of our risks in some cases depends upon the use of analytical and/or forecasting models. If the models used to mitigate these risks are inadequate, we may incur losses. In addition, there may be risks that exist, or that develop in the future, that we have not appropriately anticipated, identified or mitigated. If our risk management framework does not effectively identify or mitigate our risks, we could suffer unexpected losses and could be materially adversely affected.

Natural disasters, acts of terrorism, pandemics and other external events could harm our business.

Natural disasters can disrupt our operations, result in damage to our properties, reduce or destroy the value of the collateral for our loans and negatively affect the economies in which we operate, which could have a material adverse effect on our results of operations and financial condition. A significant natural disaster, such as a tornado, hurricane, earthquake, fire or flood, could have a material adverse impact on our ability to conduct business, and our insurance coverage may be insufficient to compensate for losses that may occur. Public health crises, such as new pandemics and epidemics, political crises, such as acts of terrorism, war, civil unrest, and political instability, or other events outside of our control including acts of violence or human error could cause disruptions to our business or the economy as a whole. While we have established and regularly test disaster recovery procedures, the occurrence of any such event could have a material adverse effect on our business, operations and financial condition.

Climate change and related legislative and regulatory initiatives may result in operational changes and expenditures that could significantly impact our business.

The current and anticipated effects of climate change are creating an increasing level of concern for the state of the global environment. As a result, political and social attention to the issue of climate change has increased. In recent years, governments across the world have entered into international agreements to attempt to reduce global temperatures, in part by limiting greenhouse gas emissions. The U.S. Congress, state legislatures and federal and state regulatory agencies have continued to propose and advance numerous legislative and regulatory initiatives seeking to mitigate the effects of climate change. These agreements and measures may result in the imposition of taxes and fees, the required purchase of emission credits, and the implementation of significant operational changes, each of which may require us to expend significant capital and incur compliance, operating, maintenance, and remediation costs. Consumers and businesses may also change their behavior on their own as a result of these concerns. The impact on our customers will likely vary depending on their specific attributes, including reliance on, or role in, carbon intensive activities. Our efforts to take these risks into account in making lending and other decisions, including by increasing our business with climate-friendly companies, may not be effective in protecting us from the negative impact of new laws and regulations or changes in consumer or business behavior.

Changes in accounting standards could affect reported earnings.

The bodies responsible for establishing accounting standards, including the Financial Accounting Standards Board ("FASB"), the SEC, and other regulatory bodies, periodically change the financial accounting and reporting guidance that governs the preparation of our financial statements. These changes can materially impact how we record and report our financial condition and results of operations. In some cases, we could be required to apply new or revised guidance retroactively.

Changes in tax laws and regulations and differences in interpretation of tax laws and regulations may adversely impact our financial statements.

From time to time, local, state or federal tax authorities change tax laws and regulations, which may result in a decrease or increase to our deferred tax asset. Local, state or federal tax authorities may interpret laws and regulations differently than we do and challenge tax positions that we have taken on tax returns. This may result in differences in the treatment of revenues, deductions, credits and/or differences in the timing of these items. The differences in treatment may result in payment of additional taxes, interest, penalties, or litigation costs that could have a material adverse effect on our results.

Holders of our subordinated notes have rights that are senior to those of our common shareholders. We have supported a portion of our growth through the issuance of subordinated notes.

At December 31, 2022, we had aggregate principal amount of $35.0 million in subordinated notes. Payments of the principal and interest on the subordinated notes are senior to our shares of common stock. As a result, we must make payments on our subordinated notes before any dividends can be paid to our common shareholders. In addition, in the event of our bankruptcy, dissolution or liquidation, the holders of the subordinated notes must be satisfied before any distributions can be made on our common stock.

Acquisitions may disrupt our business and dilute shareholder value.

We regularly evaluate merger and acquisition opportunities with other financial institutions and financial services companies. As a result, negotiations may take place and future mergers or acquisitions involving cash or equity securities may occur at any time. We would seek acquisition partners that offer us either significant market presence or the potential to expand our market footprint and improve profitability through economies of scale or expanded services.

Acquiring other banks, businesses, or branches may have an adverse effect on our financial results and may involve various other risks commonly associated with acquisitions, including, among other things:

- difficulty in estimating the value of the target company;
- payment of a premium over book and market values that may dilute our tangible book value and earnings per share in the short and long term;
- potential exposure to unknown or contingent tax or other liabilities of the target company;
- exposure to potential asset quality problems of the target company;
- potential volatility in reported income associated with goodwill impairment losses;
- difficulty and expense of integrating the operations and personnel of the target company;
- the risk that acquired business will not perform in accordance with Management’s expectations based on its inability to realize the expected revenue increases, cost savings, increases in geographic or product presence, and/or other projected benefits;
- potential disruptions to our business;
- potential diversion of our Management’s time and attention; and
- the possible loss of key employees and customers of the target company.

Attractive acquisition opportunities may not be available to us in the future which could limit the growth of our business.

We may not be able to sustain a positive rate of growth or expand our business. We expect that other banking and financial service companies, many of which have significantly greater resources than us, will compete with us in acquiring other financial institutions if we pursue such acquisitions. This competition could increase prices for potential acquisitions that we believe are attractive. Also, acquisitions are subject to various regulatory approvals. If we fail to receive the appropriate regulatory approvals for a transaction, we will not be able to consummate such transaction which we believe to be in our best interests. Among other things, our regulators consider our capital, liquidity, profitability, regulatory compliance and levels of goodwill and intangibles when considering acquisition and expansion proposals. Other factors, such as economic conditions and legislative considerations, may also impede or prohibit our ability to expand our market presence. If we are not able to successfully grow our business, our financial condition and results of operations could be adversely affected.

Various factors may make takeover attempts more difficult to achieve.

Certain provisions of our articles of organization and state and federal banking laws, including regulatory approval requirements, could make it more difficult for a third party to acquire control of us without our Board of Directors' approval. Under federal law, subject to certain exemptions, a person, entity or group must notify the Federal Reserve before acquiring control of a bank holding company. Acquisition of 10% or more of any class of voting stock of a bank holding company creates a rebuttable presumption that the acquirer "controls" the bank holding company. Also, a bank holding company must obtain the prior approval of the Federal Reserve before, among other things, acquiring direct or indirect ownership or control of more than 5% of any class of voting shares of any bank, including HarborOne Bank.

There also are provisions in our articles of organization that may be used to delay or block a takeover attempt, including a provision that prohibits any person from voting more than 10% of the shares of common stock outstanding. Furthermore, shares of restricted stock and stock options that we have granted or may grant to employees and directors, stock ownership by our Management and directors, employment agreements that we have entered into with our executive officers, and other factors may make it more difficult for companies or persons to acquire control of us without the consent of our Board of Directors. Taken as a whole, these statutory provisions and provisions in our articles of organization could result in our being less attractive to a potential acquirer and thus could adversely affect the market price of our common stock.

Securities issued by us, including our common stock, are not FDIC insured.

Securities issued by us, including our common stock, are not savings or deposit accounts or other obligations of any bank and are not insured by the FDIC, any other governmental agency or instrumentality, or any private insurer, and are subject to investment risk, including the possible loss of principal.

RISKS RELATED TO OUR REGULATORY ENVIRONMENT

Our banking business is highly regulated, which could limit or restrict our activities and impose financial requirements or limitations on the conduct of our business.

We are subject to regulation and supervision by the Federal Reserve, and the Bank is subject to regulation and supervision by the Commissioner and the FDIC. Federal and state laws and regulations govern numerous matters affecting us, including changes in the ownership or control of banks and bank holding companies, maintenance of adequate capital and the financial condition of a financial institution, permissible types, amounts and terms of extensions of credit and investments, permissible non-banking activities, the level of reserves against deposits and restrictions on stock repurchases and dividend payments. The FDIC and the Commissioner have the power to issue cease and desist orders to prevent or remedy unsafe or unsound practices or violations of law by banks subject to their regulation, and the Federal Reserve possesses similar powers with respect to bank holding companies. These and other restrictions limit the manner in which we and HarborOne Bank may conduct business and obtain financing.

Federal regulations establish minimum capital requirements for insured depository institutions, including minimum risk-based capital and leverage ratios, and define "capital" for calculating these ratios. The minimum capital requirements are: (i) a common equity Tier 1 capital ratio of 4.5%; (ii) a Tier 1 to risk-based assets capital ratio of 6%; (iii) a total capital ratio of 8%; and (iv) a Tier 1 leverage ratio of 4%. The regulations also establish a "capital conservation buffer" of 2.5%. An institution will be subject to limitations on paying dividends, engaging in share repurchases and paying discretionary bonuses if its capital level falls below the capital conservation buffer amount. The application of these capital requirements could, among other things, require us to maintain higher capital resulting in lower returns on equity, and we may be required to obtain additional capital to comply or result in regulatory actions if we are unable to comply with such requirements. See Item 1, "Business-Supervision and Regulation-Capital Adequacy and Safety and Soundness-Regulatory Capital Requirements."

Because our business is highly regulated, the laws, rules, regulations, and supervisory guidance and policies applicable to us are subject to regular modification and change. Changes to statutes, regulations, or regulatory policies, including changes in interpretation or implementation of statutes, regulations, or policies, could affect us in substantial and unpredictable ways. Such changes could subject us to additional costs, limit the types of financial services and products we may offer, and/or increase the ability of non-banks to offer competing financial services and products, among other things. Failure to comply with laws, regulations, or policies could result in sanctions by regulatory agencies, civil money penalties, and/or reputation damage, which could have a material adverse effect on our business, financial condition, and results of operations. See "—*Supervision and Regulation*" for a discussion of the regulations to which we are subject.

We are subject to numerous laws designed to protect consumers, including the Community Reinvestment Act and fair lending laws, and failure to comply with these laws could lead to a wide variety of sanctions.

The Community Reinvestment Act, the Equal Credit Opportunity Act, the Fair Housing Act and other fair lending laws and regulations impose community investment and nondiscriminatory lending requirements on financial institutions. The Consumer Financial Protection Bureau, the Department of Justice and other federal agencies are responsible for enforcing these laws and regulations. A successful regulatory challenge to an institution's performance under the Community Reinvestment Act, the Equal Credit Opportunity Act, the Fair Housing Act or other fair lending laws and regulations could result in a wide variety of sanctions, including damages and civil money penalties, injunctive relief, restrictions on mergers and acquisitions, restrictions on expansion and restrictions on entering new business lines. Private parties may also have the ability to challenge an institution's performance under fair lending laws in private class action litigation. Such actions could have a material adverse effect on our business, financial condition and results of operations.

We face significant legal risks, both from regulatory investigations and proceedings and from private actions brought against us.

As a participant in the financial services industry, many aspects of our business involve substantial risk of legal liability. From time to time, customers and others make claims and take legal action pertaining to the performance of our responsibilities, such as the recent legal proceeding against the Bank for our overdraft fee practices. Whether customer claims and legal action related to the performance of our responsibilities are founded or unfounded, if such claims and legal actions are not resolved in a manner favorable to us, they may result in significant expenses, diversion of Management's time and attention and financial liability. Any financial liability or reputational damage could have a material adverse effect on our business, which, in turn, could have a material adverse effect on our financial condition and results of operations. There is no assurance that litigation with private parties will not increase in the future. Actions against us may result in judgments, settlements, fines, penalties or other results adverse to us, which could materially adversely affect our business, financial condition or results of operations, or cause serious reputational harm to us.

We may become subject to enforcements actions even though noncompliance was inadvertent or unintentional.

The financial services industry is subject to intense scrutiny from bank supervisors in the examination process and aggressive enforcement of federal and state regulations, particularly with respect to mortgage-related practices and other consumer compliance matters, and compliance with anti-money laundering, BSA and OFAC regulations, and economic sanctions against certain foreign countries and nationals. Enforcement actions may be initiated for violations of laws and regulations and unsafe or unsound practices. We maintain systems and procedures designed to ensure that we comply with applicable laws and regulations; however, some legal/regulatory frameworks provide for the imposition of fines or penalties for noncompliance even though the noncompliance was inadvertent or unintentional and even though there was in place at the time systems and procedures designed to ensure compliance. Failure to comply with these and other regulations, and supervisory expectations related thereto, may result in fines, penalties, lawsuits, regulatory sanctions, reputation damage, or restrictions on our business.

The Federal Reserve may require us to commit capital resources to support the Bank.

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

We are subject to stringent capital requirements which may adversely impact return on equity, require additional capital raises, or limit the ability to pay dividends or repurchase shares.

Federal regulations establish minimum capital requirements for insured depository institutions, including minimum risk-based capital and leverage ratios, and define "capital" for calculating these ratios. The minimum capital requirements are: (i) a common equity Tier 1 capital ratio of 4.5%; (ii) a Tier 1 to risk-based assets capital ratio of 6%; (iii) a total capital ratio of 8%; and (iv) a Tier 1 leverage ratio of 4%. The regulations also establish a "capital conservation buffer" of 2.5%, which if complied will result in the following minimum ratios: (i) a common equity Tier 1 capital ratio of 7.0%; (ii) a Tier 1 to risk-based assets capital ratio of 8.5%; and (iii) a total capital ratio of 10.5%. An institution will be subject to limitations on paying dividends, engaging in share repurchases and paying discretionary bonuses if its capital level falls below the capital conservation buffer amount. The application of these capital requirements could, among other things, require us to maintain higher capital resulting in lower returns on equity, and we may be required to obtain additional capital to comply or result in regulatory actions if we are unable to comply with such requirements.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

At December 31, 2022, we conducted business throughout our Greater Boston and southeastern New England network of 31 full-service branches, and commercial lending offices in each of Boston, Massachusetts and Providence, Rhode Island. In addition, we have administrative offices in Brockton, Massachusetts. Of the Bank's branches, 17 were owned, nine were leased, and five were owned on leased land. Most of our branches are equipped with ATMs and drive-up windows, and we also have five stand-alone ATM locations in Massachusetts. HarborOne Mortgage, LLC, a subsidiary of HarborOne Bank leases 27 offices in Maine, Massachusetts, New Hampshire, New Jersey, and Rhode Island, and is licensed to lend in six additional states. At December 31, 2022, the total net book value of our land, buildings, furniture, fixtures and equipment was $49.0 million.

ITEM 3. LEGAL PROCEEDINGS

During the fiscal year ended December 31, 2022, except as set forth below, the Company was not involved in any material pending legal proceedings as a plaintiff or as a defendant other than routine legal proceedings occurring in the ordinary course of business. Management believes that those routine legal proceedings involve, in the aggregate, amounts that are immaterial to the Company's financial condition and results of operations financial condition or results of operations.

In the fourth quarter of 2022, the Company reached an agreement-in-principle to settle a purported class action lawsuit concerning overdraft fees on re-presented transactions. The matter, which asserted claims for breach of contract against HarborOne Bank, was filed in the Massachusetts Superior Court in June 2022 and captioned *Rita Meaden v. HarborOne Bank*. Also in June 2022, the Company received notice of a demand letter served on the Bank by the same plaintiff pursuant to the Massachusetts Consumer Protection Act, M.G.L Ch. 93A ("Chapter 93A"). The complaint and demand letter sought monetary damages for the named plaintiff and the putative class, plus double or treble damages and reasonable attorneys' fees, as may be allowed under Chapter 93A. The Bank retained outside litigation counsel in this matter, and discussions to find a mutually acceptable resolution, including mediation before a retired Massachusetts Superior Court judge, proceeded between the parties. On February 28, 2023, the case was refiled in federal court in Massachusetts, where the parties have requested preliminarily approval of a settlement agreement, under which the Bank expects to pay damages of approximately $875,000 in exchange for the dismissal with prejudice and release of all claims that have been or could have been asserted in the filed class action lawsuit on behalf of the plaintiff and all putative settlement class members. The proposed settlement remains subject to preliminary court approval, notice to class members, and final court approval.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

ITEM 5. MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

The Company's common stock trades on the Nasdaq Global Select Market under the symbol "HONE." The approximate number of shareholders of record of the Company's common stock as of March 1, 2023 was 2,927. The number of record-holders may not reflect the number of persons or entities holding stock in nominee name through banks, brokerage firms and other nominees.

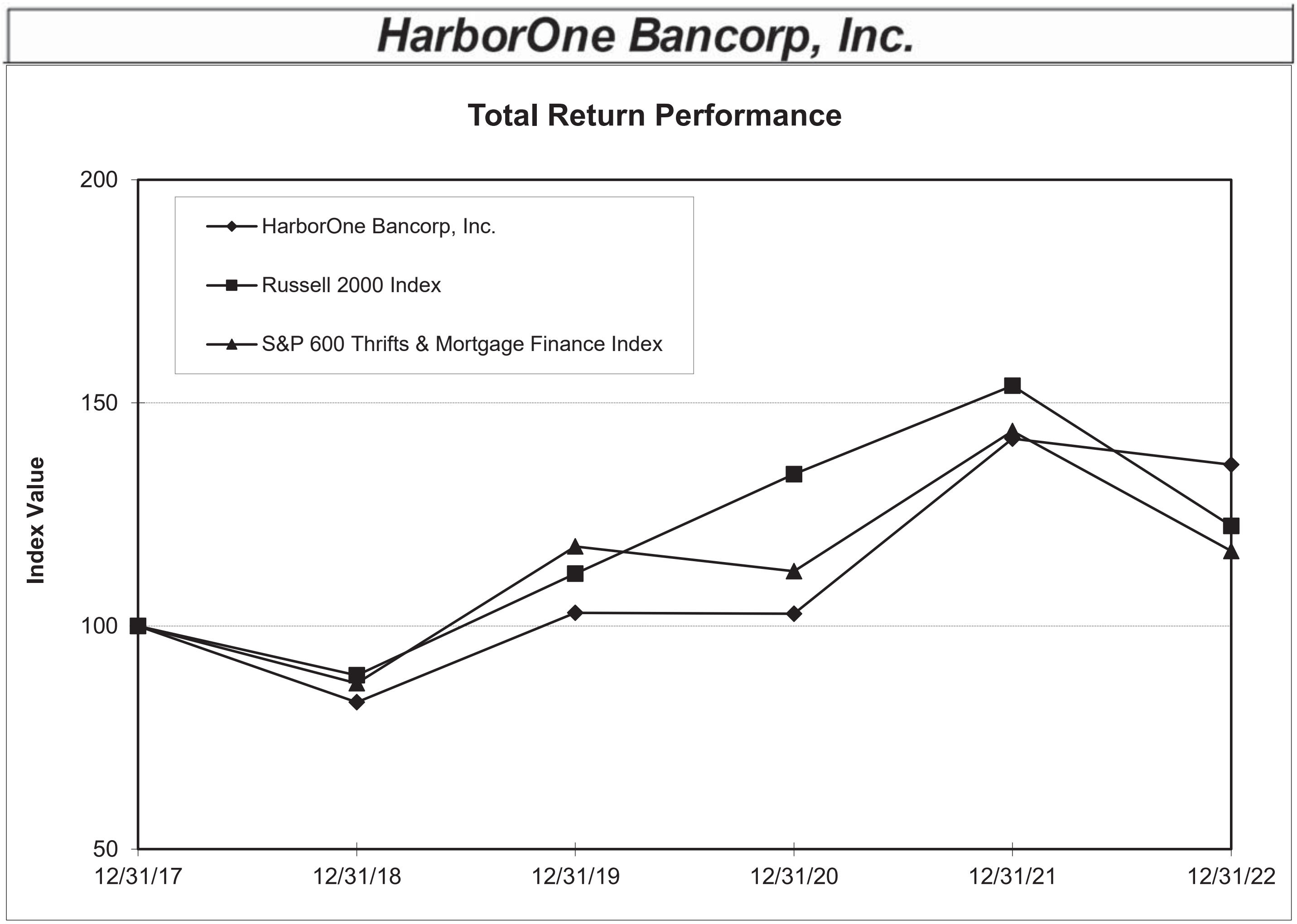
The Company currently pays quarterly cash dividends in the amount of $0.07 per share. The Company's primary source of funds for dividends paid to shareholders is the receipt of dividends from the Bank; future dividends will depend on the earnings of the Bank, its financial condition, its need for funds, applicable government policies and regulations, and other such matters the Board of Directors deems appropriate. Management believes that the Bank will continue to generate adequate earnings to continue to pay comparable dividends in the future.

Stock Performance Graph

The following stock performance graph compares the cumulative total shareholder return on the Company's common stock against the cumulative total return of the Russell 2000 Index and the S&P 600 Thrift and Mortgage Finance Index from December 31, 2017 to December 31, 2022. The results presented assume that the value of the Company's common stock and each index was $100.00 on December 31, 2016. Total return assumes reinvestment of dividends.

The following information in this Item 5 of this Annual Report 10-K is not deemed to be "soliciting material" or to be "filed" with the SEC or subject to Regulation 14A or 14C under the Securities Exchange Act of 1934 or to be liabilities of Section 18 of the Securities Exchange Act of 1934, and will not be deemed incorporated by reference into any filing under the Securities Act of 1933 or the Securities Exchange Act of 1934, except to the extent the Company specifically incorporates it by reference to such filing. The stock price performance shown on the stock performance graph and associated table below is not necessarily indicative of future price performance. Information used in the graph and table was obtained from a third-party provider, a source believed to be reliable, but the Company is not responsible for any errors or omissions in such information.

The following chart depicts the total return performance of the Company:



Index	12/31/17	12/31/18	12/31/19	12/31/20	12/31/21	12/31/22
HarborOne Bancorp, Inc.	100.00	82.93	102.98	102.78	141.94	136.13
Russell 2000 Index	100.00	88.99	111.70	134.00	153.85	122.41
S&P 600 Thrifts & Mortgage Finance Index	100.00	87.21	117.82	112.28	143.69	116.80

Source : S&P Global Market Intelligence
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Purchases of Equity Securities by the Issuer and Affiliated Purchases

The following table provides information regarding the Company's purchase of its common stock during the three-month period ended December 31, 2022

	Issuer Purchases of Equity Securities				
	(a) Total Number of Shares Purchased	(b) Average Price Paid Per Share		(c) Total Number of Shares (or Units) Purchased as Part of Publicly Announced Plans or Programs	(d) Maximum Number (or Approximate Dollar Value) of Shares (or Units) that May Yet Be Purchased Under the Plans or Programs
October 1 to October 31, 2022	347,840	$	13.63	347,840	—
November 1 to November 30, 2022	—		—	347,840	—
December 1 to December 31, 2022	1,898		13.70	349,738	—
Total	349,738	$	13.63	349,738	55,292

On April 12, 2022, the Company announced a fourth share repurchase program to repurchase up to 2,526,134 shares of the Company's common stock, or approximately 5% of its outstanding shares. Under the fourth share repurchase program, the Company repurchased 2,470,842 shares at an average cost of $13.80 per share through December 31, 2022. The Company announced a fifth share repurchase program on September 21, 2022, to commence following the completion of the fourth share repurchase program.

ITEM 6. RESERVED.

ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

The selected financial and other data of the Company set forth below are derived in part from, and should be read in conjunction with, the Consolidated Financial Statements of the Company and Notes thereto presented elsewhere herein. The results reflect the acquisition of Coastway on October 5, 2018. Information pertaining to fiscal year 2020 was included in the Company's Annual Report on Form 10-K for the year ended December 31, 2020 under Part II, Item 7, "Management's Discussion and Analysis of Financial Position and Results of Operations," which was filed with the SEC on March 12, 2021.

	December 31,				
	2022	2021	2020	2019	2018
			(in thousands)		
Financial Condition Data:					
Total assets	$ 5,359,545	$ 4,553,405	$ 4,483,615	$ 4,058,921	$ 3,653,121
Cash and cash equivalents	98,017	194,719	205,870	211,616	105,521
Securities available for sale, at fair value	301,149	394,036	276,498	239,473	209,293
Securities held to maturity, at cost	19,949	—	—	26,372	44,688
Asset held for sale	—	881	—	8,536	—
Loans held for sale, at fair value	18,544	45,642	208,612	110,552	42,107
Loans receivable, net	4,504,434	3,562,356	3,439,247	3,147,498	2,964,852
Deposits	4,189,499	3,682,649	3,506,209	2,942,873	2,685,061
Borrowings	434,960	89,870	183,130	388,039	553,735
Total equity	616,976	679,261	696,314	665,794	357,574

	Year Ended December 31,				
	2022	2021	2020	2019	2018
			(in thousands)		
Selected Operating Data:					
Interest and dividend income	$ 171,930	$ 143,895	$ 148,558	$ 154,784	$ 115,708
Interest expense	22,944	12,525	28,492	45,722	26,778
Net interest income	148,986	131,370	120,066	109,062	88,930
Provision (benefit) for credit losses	5,660	(7,258)	34,815	4,747	3,828
Net interest income, after provision (benefit) for credit losses	143,326	138,628	85,251	104,315	85,102
Mortgage banking income	31,250	77,334	113,909	36,775	29,801
Loss on asset held for sale	—	—	—	(482)	—
Gains on sale and calls of securities, net	—	241	2,533	1,344	5
Other noninterest income	26,059	23,111	22,238	22,458	18,584
Noninterest expense	138,906	158,862	165,922	141,734	119,285
Income before income taxes	61,729	80,452	58,009	22,676	14,207
Income tax expense	16,140	21,935	13,217	4,408	2,813
Net income	$ 45,589	$ 58,517	$ 44,792	$ 18,268	$ 11,394

	At or For the Year Ended December 31,				
	2022	2021	2020	2019	2018
Performance Ratios:					
Return on average assets (ratio of net income to average total assets)	0.95 %	1.29 %	1.05 %	0.49 %	0.39 %
Return on average equity (ratio of net income to average equity)	7.14	8.45	6.55	3.82	3.27
Interest rate spread(1)	3.16	2.99	2.80	2.81	2.99
Net interest margin(2)	3.35	3.12	3.06	3.14	3.22
Efficiency ratio(3)	66.90	67.94	63.48	82.40	86.35
Average interest-earning assets to average interest-bearing liabilities	136.01	139.75	134.81	125.39	124.05
Average equity to average total assets	13.37	15.20	16.09	12.78	11.91
Asset Quality Ratios:					
Non-performing assets to total assets	0.28 %	0.79 %	0.77 %	0.76 %	0.51 %
Non-performing loans to total loans	0.32	1.00	0.99	0.96	0.59
Allowance for credit losses on loans to non-performing loans	305.93	125.60	162.44	79.35	116.62
Allowance for credit losses on loans to total loans	0.99	1.26	1.59	0.76	0.69
Allowance for credit losses on loans to total loans, excluding PPP	0.99	1.27	1.64	—	—
Net loans charged off as a percent of average loans outstanding	0.09	0.08	0.10	0.04	0.07
Capital Ratios for Bancorp:					
Common equity Tier 1 to risk weighted assets	12.8 %	16.4 %	17.7 %	18.7 %	9.9 %
Tier 1 capital to risk weighted assets	12.8	16.4	17.7	18.7	9.9
Total capital to risk weighted assets	14.6	18.5	19.9	20.6	11.8
Tier 1 capital to average assets	11.5	13.6	14.5	15.3	8.2

(1) Represents the difference between the weighted average yield on average interest-earning assets on a fully tax equivalent basis and the weighted average cost of interest-bearing liabilities.
(2) Represents net interest income as a percent of average interest-earning assets on a fully tax equivalent basis.
(3) Represents noninterest expense less other intangible asset amortization expense, divided by the sum of net interest income and noninterest income.

All material intercompany balances and transactions have been eliminated in consolidation. When necessary, certain amounts in prior year financial statements have been reclassified to conform to the current year's presentation. The following discussion and analysis is presented to assist the reader in understanding and evaluating of the Company's financial condition and results of operations. It is intended to complement the Consolidated Financial Statements, footnotes, and supplemental financial data appearing elsewhere in this Form 10-K and should be read in conjunction therewith**.**

Overview

The Company's principal subsidiary is the Bank. The Bank is a Massachusetts trust company whose primary subsidiary is a residential mortgage company, HarborOne Mortgage, acquired on July 1, 2015.

As described in the Notes to Consolidated Financial Statements, we have two reportable segments: HarborOne Bank and HarborOne Mortgage. The Bank segment provides consumer and business banking products and services to individuals, businesses and municipalities. Consumer products include loan and deposit products, and business banking products include loans for working capital, inventory and general corporate use, commercial real estate construction loans, and deposit accounts. The HarborOne Mortgage segment consists of originating residential mortgage loans primarily for sale in the secondary market and the servicing of those loans.

The HarborOne Bank segment generates the significant majority of our consolidated net interest income and requires the provision for credit losses. The HarborOne Mortgage segment generates the majority of our noninterest income. We have provided below a discussion of the material results of operations for each segment on a separate basis for the years ended December 31, 2022 and 2021, which focuses on noninterest income and noninterest expenses. We have also provided a discussion of the consolidated operations of the Company, which includes the operations of HarborOne Bank and HarborOne Mortgage, for the same periods.

For additional revenue, net income, assets, and other financial information for each of the Company's reportable segments, see Part II, Item 8. "Financial Statements and Supplementary Data – Note 21: Segment Reporting."

Critical Accounting Policies and Estimates

The Company's significant accounting policies and modifications to significant accounting policies made during the year are described in Note 1 of the Notes to our Consolidated Financial Statements included in Part II, Item 8 of this Form 10-K. Not all significant accounting policies require Management to make difficult, subjective or complex judgments. Critical accounting policies are defined as those involving significant judgments and assumptions by Management that could have a material impact on the carrying value of certain assets or on income under different assumptions or conditions.

Management believes that the most critical accounting policies, which involve the most complex or subjective decisions or assessments, and as such, have a greater possibility of producing results that could materially differ from amounts originally reported are as follows:

Allowance for Credit Losses. As a result of the adoption of ASU 2016-13 effective January 1, 2022, the Company updated its critical accounting policy for the allowance for credit losses ("ACL"). The updates in this standard replace the incurred loss impairment GAAP methodology with the CECL methodology. The CECL methodology incorporates current conditions, and "reasonable and supportable" forecasts, as well as prepayments, to calculate the allowance for credit losses on loans ("ACLL"), representing Management's estimate of expected credit losses, as of the reporting date, over the expected contractual life of our loan portfolio. ASU 2016-13 also applies to off-balance sheet credit exposures.

Arriving at an appropriate amount of ACLL involves a high degree of judgement. The Company estimates credit losses on a collective basis for loans sharing similar risk characteristics using a quantitative model combined with an assessment of certain qualitative factors designed to address forecast risk and model risk inherent in the quantitative model output. Management's judgement is required for the selection and application of these factors which are derived from peer and historical loss experience as well as assumptions surrounding expected future losses and economic forecasts.

Loans that no longer share similar risk characteristics with any pools of assets are subject to individual assessment and are removed from the collectively assessed pools to avoid double counting. The ACL for individually analyzed loans is measured using a discounted cash flow ("DCF") method based upon the loan's contractual effective interest rate, or at the loan's observable market price, or, if the loan was collateral dependent, at the fair value of the collateral. Changes in these estimates could be due to a number of circumstances which may have a direct impact on the provision for credit losses and may result in changes to the amount of allowance.

Because the ACLL is a reflection of the Company's best estimate of loss based on historical experience and trends, current economic data and a forecast of future conditions as of a point in time, factors may arise that result in different estimations. While Management utilizes its best judgment and information available, the ultimate adequacy of our ACLL is dependent upon a variety of factors beyond our control, including the performance of our portfolios, the economy, and changes in interest rates. Conditions in the future may vary from our forecasts, causing realized losses to be either higher or lower than forecasted, which will result in either additional provisions from income or a benefit to income based on the performance of the portfolio.

In estimating the ACL on loans, management considers the sensitivity of the model and significant judgments and assumptions that could result in an amount that is materially different from management's estimate. Management performed a sensitivity analysis to understand the impact of hypothetical changes in qualitative loss factors on the ACL. The sensitivity analysis evaluated the impact of changes to commercial loan segments due to the concentration of the Bank's ACL allocation in the total commercial portfolio. At December 31, 2022, the potential impact of changes to Management's judgements on total commercial qualitative risk factors ranged between a $13.9 million reduction and $17.3 million increase in the ACL. This sensitivity analysis does not represent a change to management's judgment, but rather provides a hypothetical result to assess the sensitivity of the ACL to a key input.

See Note 4, "Loans and Allowance for Credit Losses," to the Consolidated Financial Statements for further discussion on the new policy and processes.

Goodwill. Goodwill is presumed to have an indefinite useful life and is tested at least annually for impairment. Impairment exists when the carrying amount of goodwill exceeds its implied fair value. If fair value exceeds the carrying amount at the time of testing, goodwill is not considered impaired. Quoted market prices in active markets are the best evidence of fair value and are considered to be used as the basis for measurement, when available. Other acceptable valuation methods include present-value measurements based on multiples of earnings or revenues, or similar performance measures. Differences in valuation techniques could result in materially different evaluations of impairment.

The determination of fair value is based on valuations using Management's assumptions of comparable transactions including completion date, industry, asset size, region, or other relevant factors, projected revenue and cash flow and performance measures. Changes in these quantitative factors, as well as downturns in economic or business conditions, could have a significant adverse impact on the fair value of the reporting unit in relation to the carrying value of goodwill and could result in an impairment loss affecting our consolidated financial statements as a whole. If the carrying amount exceeds its fair value, an impairment loss would be recognized equal to the amount of excess, limited to the amount of total goodwill allocated to the reporting unit. The impairment loss would be recognized as a charge to earnings.

Management has identified two reporting units for purposes of testing goodwill for impairment. The Company's reporting units are the same as the segments used for segment reporting: the Bank, including a security corporation and a Rhode Island passive investment corporation; and HarborOne Mortgage. See Note 8, "Goodwill and Other Intangible Assets," to the Consolidated Financial Statements for further discussion.

Deferred Tax Assets. Deferred tax assets and liabilities are reflected at currently enacted income tax rates applicable to the period in which the deferred tax assets or liabilities are expected to be realized or settled. Management reviews deferred tax assets on a quarterly basis to identify any uncertainties pertaining to the realization of such assets. In determining whether a valuation allowance is required against deferred tax assets, Management assesses historical and forecasted operating results, including a review of eligible carryforward periods, tax planning opportunities and other relevant considerations. We believe the accounting estimate related to the valuation allowance is a critical estimate because the underlying assumptions can change from period to period. For example, tax law changes or variances in future projected operating performance could result in a change in the valuation allowance. Should actual factors and conditions differ materially from those used by Management, the actual realization of net deferred tax assets could differ materially from the amounts recorded in the financial statements. If we were not able to realize all or part of our deferred tax assets in the future, an adjustment to the related valuation allowance would be charged to income tax expense in the period such determination was made and could have a negative impact on earnings. In addition, if actual factors and conditions differ materially from those used by Management, we could incur penalties and interest imposed by taxing authorities. See Note 11, "Income Taxes" to the Consolidated Financial Statements for further discussion.

Please see the Notes to the Consolidated Financial Statements for additional discussion of accounting policies.

Comparison of Financial Condition at December 31, 2022 and December 31, 2021

Total Assets. Total assets increased $806.1 million, or 17.7%, to $5.36 billion at December 31, 2022 from $4.55 billion at December 31, 2021. The increase primarily reflects an increase of $941.9 million in loans, partially offset by a decrease of $100.9 million in short-term investments.

Cash and Cash Equivalents. At December 31, 2022, cash and cash equivalents were $98.0 million, a decrease of 49.7% from $194.7 million at December 31, 2021, primarily due to cash being used to fund loan growth.

Loans Held for Sale. Loans held for sale at December 31, 2022 were $18.5 million, a decrease of $27.1 million, or 59.4%, from $45.6 million at December 31, 2021, as rising interest rates on residential mortgage loans dampened loan demand.

Loans, net. At December 31, 2022, net loans were $4.50 billion, an increase of $942.1 million, or 26.4%, from $3.56 billion at December 31, 2021. The increase in net loans is primarily due to commercial real estate and residential real estate loan growth. The increase in one- to four-family loans includes a purchased pool of $58.1 million. Effective January 1, 2022, the Company adopted Accounting Standards Update No. 2016-13, commonly referred to as CECL, which requires the measurement of expected lifetime credit losses for financial assets measured at amortized cost. CECL requires that the ACL be calculated based on current expected credit losses over the full remaining expected life of the financial assets and also consider expected future changes in macroeconomic conditions. The ACL was $45.2 million, or 0.99% of total loans, at December 31, 2022, compared to an allowance for loan loss under the incurred loss model of $45.4 million, or 1.26% of total loans, at December 31, 2021. During 2022, the ACL was impacted by provisioning for loan growth partially offset by a reduction in pandemic-related uncertainty.

The following table sets forth certain information at December 31, 2022 regarding scheduled contractual maturities during the period indicated. The table does not include any estimate of prepayments. Demand loans having no stated schedule of repayments and no stated maturity are reported as due in one year or less. The following table also sets forth the rate structure of loans scheduled to mature after one year.

	One- to Four-Family Residential Real Estate	Second Mortgage and Equity Lines of Credit	Residential Construction	Commercial Real Estate	Commercial Construction	Commercial and Industrial	Consumer	Total Loans
				(in thousands)				
Amounts due in:								
One year or less	$ 435	$ 1,425	$ —	$ 70,828	$ 9,134	$ 34,017	$ 19,522	$ 135,361
After one year through five years	13,346	11,290	—	957,936	137,367	146,503	19,302	1,285,744
After five years through fifteen years	126,967	28,893	2,274	1,166,038	52,810	237,666	2,096	1,616,744
Beyond fifteen years	1,291,515	124,611	33,563	55,542	—	6,089	501	1,511,821
Total	$ 1,432,263	$ 166,219	$ 35,837	$ 2,250,344	$ 199,311	$ 424,275	$ 41,421	$ 4,549,670
Interest rate terms on amounts due after one year:								
Fixed rate	$ 1,277,981	$ 9,811	$ 35,837	$ 1,328,106	$ 129,689	$ 189,840	$ 21,899	$ 2,993,163
Adjustable-rate	$ 153,847	$ 154,983	$ —	$ 851,410	$ 60,488	$ 200,418	$ —	$ 1,421,146

Generally, the actual maturity of loans is shorter than their contractual maturity due to prepayments. The average life of residential real estate loans is impacted by the current interest rate environment. The average life tends to increase when current mortgage loan rates are higher than the rates of the loans in the portfolio and to decrease when current rates are lower than the rates of the loans in the portfolio. Also, commercial and commercial real estate loans may be renewed at or near maturity, resulting in significant differences in principal payments actually received as compared to amounts contractually due in a period.

Securities. Total investment securities at December 31, 2022 were $321.1 million, a decrease of $72.9 million, or 18.5%, from $394.0 million at December 31, 2021. Securities available for sale were negatively impacted by unrealized losses of $68.3 million as December 31, 2022, as compared to $3.6 million of unrealized losses as of December 31, 2021. As of December 31, 2022 and December 31, 2021, the gross unrealized loss positions were primarily related to mortgage-backed securities and other obligations issued by U.S. government agencies or U.S. government-sponsored enterprises. These securities carry the explicit and/or implicit guarantee of the U.S. government and have a long history of zero credit loss. Total gross unrealized losses were primarily attributable to changes in interest rates relative to when the investment securities were purchased, and not due to the credit quality of the investment securities.

Securities held to maturity amounted to $19.9 million at December 31, 2022 and reflected the purchase of $15.0 million in U.S. government agency notes and a $5.0 million SBA asset-backed security. During the year ended December 31, 2022, purchases of available-for-sale securities included $10.0 million of mortgage-backed securities, $5.0 million of U.S. government agency notes, and $1.0 million of corporate bonds.

The following table sets forth the stated maturities and weighted average yields of investment securities at December 31, 2022. Weighted average yields in the table below have been calculated based on the amortized cost of the security:

	One Year or Less		More than One Year to Five Years		More than Five Years to Ten Years		More than Ten Years		Total	
	Amortized Cost	Weighted Average Yield	Amortized Cost	Weighted Average Yield	Amortized Cost	Weighted Average Yield	Amortized Cost	Weighted Average Yield	Amortized Cost	Weighted Average Yield
	(dollars in thousands)									
Securities available for sale:										
Debt securities:										
U.S. government and government-sponsored enterprise obligations	$ —	— %	$ 5,000	3.40 %	$ 42,143	1.62 %	$ —	— %	$ 47,143	1.81 %
U.S. government agency and government-sponsored mortgage-backed and collateralized mortgage obligations	—	—	249	2.39	5,547	2.25	312,780	2.07	318,576	2.07
SBA asset-backed securities	—	—	2,685	2.35	—	—	—	—	2,685	2.35
Corporate bonds	—	—	—	—	1,000	3.62			1,000	3.62
Total debt securities	$ —	— %	$ 7,934	3.01 %	$ 48,690	1.73 %	$ 312,780	2.07 %	$ 369,404	2.04 %
Securities held to maturity:										
Debt securities:										
U.S. government and government-sponsored enterprise obligations	$ —	— %	$ 15,000	3.83 %	$ —	— %	$ —	— %	$ 15,000	3.83 %
SBA asset-backed securities	—	—	—	—	4,949	4.46	—	—	4,949	4.46
Total debt securities	$ —	— %	$ 15,000	3.83 %	$ 4,949	4.46 %	$ —	— %	$ 19,949	3.99 %

Mortgage Servicing Rights ("MSRs"). MSRs are created as a result of our mortgage banking origination activities and accounted for at fair value. At December 31, 2022, we serviced mortgage loans for others with an aggregate outstanding principal balance of $3.62 billion. Total MSRs were $48.1 million at December 31, 2022, compared to $38.3 million at December 31, 2021. The change in total MSRs for the year ended December 31, 2022 reflects mortgage servicing rights retained of $4.5 million, amortization due to principal paydowns on the underlying mortgages of $2.9 million and a fair value mark of $8.3 million.

Quarterly, we utilize a third-party provider to assist in the determination of the fair value of our MSRs. They provide the appropriate prepayment speed, and discount and default rate assumptions based on our portfolio and key benchmark mortgage rates. Management reviews the assumptions and calculation. Any measurement of fair value is limited by the conditions existing and assumptions made at a particular point in time. Those assumptions may not be appropriate if they are applied to a different point in time.

The assumptions that impact the MSR fair value calculation are significantly impacted by the residential mortgage benchmark indices. Decreasing mortgage rates normally encourage increased mortgage refinancing activity, which reduces the life of the loans underlying the MSRs, thereby reducing the value of MSRs, whereas increasing interest rates would result in increases in fair value, and a corresponding increase in earnings. MSRs recorded during periods of historically low interest rates may be less sensitive to falling rates in the future as they were originated in a low mortgage rate environment.

Deposits. Deposits increased $506.9 million, or 13.8%, to $4.19 billion at December 31, 2022 from $3.68 billion at December 31, 2021. The following table sets forth information concerning the composition of deposits:

	December 31,		Increase (Decrease)	
	2022	2021	Dollars	Percent
	(dollars in thousands)			
Noninterest-bearing deposits	$ 762,576	$ 743,051	$ 19,525	2.6 %
NOW accounts	297,625	313,684	(16,059)	(5.1)
Regular savings	1,468,172	1,138,980	329,192	28.9
Money market accounts	451,663	548,830	(97,167)	(17.7)
Term certificate accounts	494,599	527,548	(32,949)	(6.2)
Consumer and business deposits	3,474,635	3,272,093	202,542	6.2
Municipal deposits	413,484	310,556	102,928	33.1
Wholesale deposits	301,380	100,000	201,380	201.4
Total deposits	$ 4,189,499	$ 3,682,649	$ 506,850	13.8 %
Reciprocal deposits	$ 28,560	$ 43,757	$ (15,197)	(34.7)%

The growth in deposits was driven by an increase of $202.5 million in consumer and business deposits, $201.4 million in wholesale deposits and $102.9 million in municipal deposits. Consumer and business deposit growth was primarily a response to marketing and promotions of retail savings products. At December 31, 2022, wholesale deposits were brokered deposits of $301.4 million. The wholesale deposits provide a channel for the Company to seek additional funding outside the Company's core market. The Bank participates in a reciprocal deposit program that converts deposits at the Bank into multiple deposits at other financial institutions. The reciprocal deposit program provides access to FDIC-insured deposit products in aggregate amounts exceeding the current limits for depositors. Total deposits included $28.6 million in reciprocal deposits. During the year ended December 31, 2022, we continued to focus on enhancing our deposit mix in order to better manage our cost of funds and to expand our customer relationships.

The following table sets forth the average balances and weighted average rates of our deposit products at the dates indicated:

	Year Ended December 31,								
	2022			2021			2020		
	Average Balance	Percent	Weighted Average Rate	Average Balance	Percent	Weighted Average Rate	Average Balance	Percent	Weighted Average Rate
	(dollars in thousands)								
Deposit type:									
Noninterest-bearing demand	$ 771,299	20.0 %	— %	$ 754,198	20.6 %	— %	$ 576,128	17.7 %	— %
NOW accounts	302,530	7.9	0.05	257,201	7.0	0.06	188,103	5.8	0.08
Regular savings and club	1,284,364	33.4	0.45	1,115,626	30.6	0.14	849,239	26.0	0.39
Money market	879,133	22.9	0.64	846,756	23.2	0.20	832,131	25.5	0.63
Certificates of deposit	608,005	15.8	0.67	677,760	18.6	0.78	816,893	25.0	1.72
Total	$ 3,845,331	100.0 %	0.41 %	$ 3,651,541	100.0 %	0.24 %	$ 3,262,494	100.0 %	0.70 %

The total of estimated deposits in excess of the FDIC insurance limits amounted to $1.3 billion and $952.7 million as of December 31, 2022 and 2021, respectively. In 2022, insurance for deposits in excess of FDIC limits was provided through the DIF. On February 24, 2023, at 5 p.m. local time, the Bank exited DIF. All customer non-certificates deposits as of that date and time will remain covered by DIF insurance for one year until February 24, 2024. Certificates of deposit as of that date and time will remain covered by DIF insurance until their maturity date. The following table sets forth the maturity of certificates of deposit, excluding brokered deposits, of $250,000 or more as of December 31, 2022:

Maturity Period	Amount (in thousands)
Three months or less	$ 8,312
Over three through six months	6,484
Over six months through one year	43,795
Over one year	52,519
Total	$ 111,110

Borrowings. Total borrowings from the FHLB were $400.7 million at December 31, 2022, an increase of $345.0 million from $55.7 million at December 31, 2021. On September 30, 2021, $20.0 million in FHLB borrowings with an average cost of 3.5% were prepaid, with a penalty of $1.1 million included in noninterest expense.

In August 2018, the Company issued $35.0 million in fixed-to-floating rate subordinated notes. The notes bear interest at an annual fixed rate of 5.625% until September 1, 2023, at which time the interest rate resets quarterly to an interest rate per annum equal to the three month LIBOR plus 278 basis points. We anticipate that on September 1, 2023, the interest rate will reset quarterly to an interest rate per annum equal to the three-month CME Term SOFR plus 278 basis points. The notes are carried on the Consolidated Balance Sheets net of unamortized issuance costs of $715,000 at December 31, 2022, which are being amortized over the period to maturity date.

Stockholders' equity. Total stockholders' equity was $617.0 million at December 31, 2022 compared to $679.3 million at December 31, 2021. Stockholders' equity decreased 9.2% when compared to the year ended December 31, 2021 as earnings were offset by share repurchases and elevated levels of unrealized losses on available-for-sale investment securities included in other comprehensive income. The Company purchased 4,338,637 shares at an average price of $14.16 for a total of $61.5 million, completing our third repurchase program and commencing the fourth repurchase program. A fifth share repurchase program of 2,450,208 shares was announced on September 21, 2022, to commence after the fourth program is completed. During the year ended December 31, 2021, the Company purchased a total of 5,021,067 shares at an average price of $13.68 for a total of $68.6 million. The tangible-common-equity-to-tangible-assets ratio was 10.31% at December 31, 2022 and 13.53% at December 31, 2021.

Comparison of Results of Operations for the Years Ended December 31, 2022 and 2021

HarborOne Bancorp, Inc. Consolidated

Overview. Consolidated net income for the year ended December 31, 2022 was $45.6 million, or $0.97 per diluted share, compared to net income of $58.5 million or $1.14 per diluted share, for the year ended December 31, 2021. For the year ended December 31, 2022, return on average assets was 0.95% and return on average equity was 7.14%, as compared to 1.29% and 8.45%, respectively, for the prior year. The Bank contributed $43.0 million in net income and HarborOne Mortgage contributed $4.8 million in net income. The provision for credit losses was $5.7 million for the year ended December 31, 2022 whereas the 2021 results include a $7.3 million reversal in provision for loan losses.

Average Balances and Yields. The following tables set forth average balance sheets, average yields and costs, and certain other information for the periods indicated, on a consolidated basis. Tax-exempt interest income has been adjusted to a fully taxable-equivalent, or FTE, basis using a federal tax rate of 21%. All average balances are daily average balances. Non-accrual loans were included in the computation of average balances, but have been reflected in the table as loans carrying a zero yield. The yields set forth below include the effect of deferred fees, discounts and premiums that are amortized or accreted to interest income or expense.

	Year Ended December 31,								
	2022			2021			2020		
	Average Outstanding Balance	Interest	Yield/ Cost	Average Outstanding Balance	Interest	Yield/ Cost	Average Outstanding Balance	Interest	Yield/ Cost
	(dollars in thousands)								
Interest-earning assets:									
Investment securities [(1)]	$ 390,894	$ 7,590	1.94 %	$ 337,843	$ 4,212	1.25 %	$ 264,196	$ 5,635	2.13 %
Other interest-earning assets	70,987	694	0.98	309,819	518	0.17	153,676	1,288	0.84
Loans held for sale	27,409	1,306	4.76	113,788	3,342	2.94	124,936	3,892	3.12
Loans									
Commercial loans [(2)(3)]	2,493,646	110,305	4.42	2,150,022	87,911	4.09	1,913,304	76,208	3.98
Residential real estate loans [(3)]	1,398,190	48,645	3.48	1,110,840	39,309	3.54	1,116,601	46,430	4.16
Consumer loans [(3)]	78,766	3,811	4.84	192,841	8,603	4.46	353,412	15,127	4.28
Total loans	3,970,602	162,761	4.10	3,453,703	135,823	3.93	3,383,317	137,765	4.07
Total interest-earning assets	4,459,892	172,351	3.86	4,215,153	143,895	3.41	3,926,125	148,580	3.78
Noninterest-earning assets	314,670			338,559			324,942		
Total assets	$ 4,774,562			$ 4,553,712			$ 4,251,067		
Interest-bearing liabilities:									
Savings accounts	$ 1,284,364	5,794	0.45	$ 1,115,626	1,610	0.14	$ 849,239	3,342	0.39
NOW accounts	302,530	156	0.05	257,201	163	0.06	188,103	143	0.08
Money market accounts	879,133	5,632	0.64	846,756	1,676	0.20	832,131	5,245	0.63
Certificates of deposit	495,066	3,248	0.66	577,760	4,638	0.80	714,628	12,930	1.81
Brokered deposits	112,939	800	0.71	100,000	636	0.64	102,265	1,133	1.11
Total interest-bearing deposits	3,074,032	15,630	0.51	2,897,343	8,723	0.30	2,686,366	22,793	0.85
FHLB advances	170,748	5,219	3.06	84,711	1,707	2.02	192,059	3,604	1.88
Subordinated debentures	34,221	2,095	6.12	34,096	2,095	6.14	33,967	2,095	6.17
Total borrowings	204,969	7,314	3.57	118,807	3,802	3.20	226,026	5,699	2.52
Total interest-bearing liabilities	3,279,001	22,944	0.70	3,016,150	12,525	0.42	2,912,392	28,492	0.98
Noninterest-bearing liabilities:									
Noninterest-bearing deposits	771,299			754,198			576,128		
Other noninterest-bearing liabilities	85,995			91,084			78,602		
Total liabilities	4,136,295			3,861,432			3,567,122		
Total equity	638,267			692,280			683,945		
Total liabilities and equity	$ 4,774,562			$ 4,553,712			$ 4,251,067		
Tax equivalent net interest income		149,407			131,370			120,088	
Tax equivalent interest rate spread [(4)]			3.16 %			2.99 %			2.80 %
Less: tax equivalent adjustment		421			—			22	
Net interest income as reported		$ 148,986			$ 131,370			$ 120,066	
Net interest-earning assets [(5)]	$ 1,180,891			$ 1,199,003			$ 1,013,733		
Net interest margin [(6)]			3.34 %			3.12 %			3.06 %
Tax equivalent effect			0.01			—			—
Net interest margin on a fully tax equivalent basis			3.35 %			3.12 %			3.06 %
Ratio of interest-earning assets to interest-bearing liabilities	136.01 %			139.75 %			134.81 %		
Supplemental information:									
Total deposits, including demand deposits	$ 3,845,331	$ 15,630		$ 3,651,541	$ 8,723		$ 3,262,494	$ 22,793	
Cost of total deposits			0.41 %			0.24 %			0.70 %
Total funding liabilities, including demand deposits	$ 4,050,300	$ 22,944		$ 3,770,348	$ 12,525		$ 3,488,520	$ 28,492	
Cost of total funding liabilities			0.57 %			0.33 %			0.82 %

(1) Includes securities available for sale and securities held to maturity. Interest income from tax-exempt securities is computed on a taxable equivalent basis using a tax rate of 21%. The yield on investments before tax equivalent adjustments was 2.12% for the year ended December 31, 2020. There were no exempt securities for the years ended December 31, 2022 or 2021.
(2) Includes industrial revenue bonds for the year ended December 31, 2022. Interest income from tax-exempt loans is computed on a taxable equivalent basis using a rate of 21%. The yield on commercial loans before tax equivalent adjustment at December 31, 2022 was 4.41%.
(3) Includes nonaccruing loan balances and interest received on such loans.
(4) Interest rate spread represents the difference between the yield on average interest-earning assets and the cost of average interest-bearing liabilities.
(5) Net interest-earning assets represents total interest-earning assets less total interest-bearing liabilities.
(6) Net interest margin represents net interest income divided by average total interest-earning assets.

Rate/Volume Analysis. The following table presents, on a tax equivalent basis, the effects of changing rates and volumes on our net interest income for the periods indicated, on a consolidated basis. The rate column shows the effects attributable to changes in rate (changes in rate multiplied by prior volume). The volume column shows the effects attributable to changes in volume (changes in volume multiplied by prior rate). The total column represents the sum of the prior columns. For purposes of this table, changes attributable to both rate and volume, which cannot be segregated, have been allocated proportionately based on the changes due to rate and the changes due to volume.

	Year Ended December 31,					
	2022 v. 2021			2021 v. 2020		
	Increase (Decrease) Due to Changes in		Total Increase (Decrease)	Increase (Decrease) Due to Changes in		Total Increase (Decrease)
	Volume	Rate		Volume	Rate	
Interest-earning assets:						
Investment securities	$ 580	$ 2,798	$ 3,378	$ 1,309	$ (2,732)	$ (1,423)
Other interest-earning assets	(134)	310	176	723	(1,493)	(770)
Loans held for sale	(1,670)	(366)	(2,036)	(335)	(215)	(550)
Loans						
Commercial loans	10,610	11,784	22,394	9,285	2,418	11,703
Residential real estate loans	9,735	(399)	9,336	(206)	(6,915)	(7,121)
Consumer loans	(4,672)	(120)	(4,792)	(6,554)	30	(6,524)
Total loans	15,673	11,265	26,938	2,525	(4,467)	(1,942)
Total interest-earning assets	14,449	14,007	28,456	4,222	(8,907)	(4,685)
Interest-bearing liabilities:						
Savings accounts	210	3,974	4,184	828	(2,560)	(1,732)
NOW accounts	27	(34)	(7)	46	(26)	20
Money market accounts	62	3,894	3,956	90	(3,659)	(3,569)
Certificates of deposit	(610)	(780)	(1,390)	(2,123)	(6,169)	(8,292)
Brokered deposit	77	87	164	(24)	(473)	(497)
Total interest-bearing deposits	(234)	7,141	6,907	(1,183)	(12,887)	(14,070)
FHLB advances	2,630	882	3,512	(1,533)	(364)	(1,897)
Subordinated debentures	8	(8)	—	8	(8)	—
Total borrowings	2,638	874	3,512	(1,525)	(372)	(1,897)
Total interest-bearing liabilities	2,404	8,015	10,419	(2,708)	(13,259)	(15,967)
Change in net interest income	$ 12,045	$ 5,992	$ 18,037	$ 6,930	$ 4,352	$ 11,282

Interest and Dividend Income. Interest and dividend income on a tax-equivalent basis increased $28.5 million, or 19.8%, in 2022, compared to 2021, primarily reflecting commercial loan growth in a higher interest rate environment. Loan interest income on a tax-equivalent basis increased $26.9 million to $162.8 million, average loans increased $516.9 million, and the yield increased 17 basis points from a year ago. Commercial loan income includes the recognition of deferred fees on PPP loans in the amount of $884,000, as compared to $5.9 million in 2021. Loan interest income includes $1.0 million, as compared to $3.6 million in 2021, in accretion income from the fair value discount on loans acquired from Coastway. Interest income on investment securities increased $3.4 million, or 80.2%, reflecting the increase in average balance and rate. Interest on loans held for sale decreased $2.0 million, or 60.9%, reflecting the decrease in mortgage originations, partially offset by the increase in rates.

Interest Expense. Compared to 2021, interest expense for the year ended December 31, 2022 increased $10.4 million, or 83.2% to $22.9 million from $12.5 million. The increase primarily reflects a 21-basis-point increase in the cost of interest-bearing deposits and an increase of $176.7 million in average interest-bearing deposits, resulting in a $6.9 million increase in interest expense on deposits. The cost of deposit funds was significantly impacted by rising rates, particularly the rates on savings and money market accounts. The cost of FHLB borrowings increased 104 basis points and the average balance increased $86.0 million, resulting in a $3.5 million increase in interest expense on FHLB borrowings.

Net Interest and Dividend Income. Compared to 2021, tax equivalent net interest and dividend income for the year ended December 31, 2022 increased $18.0 million, or 13.7%, to $149.4 million from $131.4 million. The tax equivalent net interest spread increased 17 basis points to 3.16% for the year ended December 31, 2022 from 2.99% for the year ended December 31, 2021, and net interest margin on a tax equivalent basis also increased 23 basis points to 3.35% for the year ended December 31, 2022 from 3.12% for the year ended December 31, 2021.

Income Tax Provision. The provision for income taxes and effective tax rate for the year ended December 31, 2022 were $16.1 million and 26.1%, respectively, compared to $21.9 million and 27.3%, respectively, for the year ended December 31, 2021. The effective tax rates for the years ended December 31, 2022 and 2021 were impacted by the recognition of a net tax benefit for a reserve release upon the expiration of the statute of limitations.

Segments. The Company has two reportable segments: HarborOne Bank and HarborOne Mortgage. Revenue from HarborOne Bank consists primarily of interest earned on loans and investment securities and service charges on deposit accounts. Revenue from HarborOne Mortgage is comprised of interest earned on loans and fees received as a result of the residential mortgage origination, sale and servicing process. Residential real estate portfolio loans are originated by HarborOne Mortgage and purchased by the Bank. The table below shows the results of operations for the Company's segments, HarborOne Bank and HarborOne Mortgage, for the years ended December 31, 2022 and 2021, and the increase or decrease in those results.

	HarborOne Bank				HarborOne Mortgage			
	Year Ended December 31,		Increase (Decrease)		Year Ended December 31,		Increase (Decrease)	
	2022	2021	Dollars	Percent	2022	2021	Dollars	Percent
	(dollars in thousands)							
Net interest and dividend income	$ 149,301	$ 129,785	$ 19,516	15.0 %	$ 1,617	$ 3,468	$ (1,851)	(53.4)%
Provision (benefit) for credit losses	5,660	(7,258)	12,918	178.0	—	—	—	—
Net interest and dividend income, after provision (benefit) for credit losses	143,641	137,043	6,598	4.8	1,617	3,468	(1,851)	(53.4)
Mortgage banking income:								
Gain on sale of mortgage loans	—	—	—	—	15,970	61,883	(45,913)	(74.2)
Intersegment gain (loss)	(3,604)	(3,665)	61	1.7	3,185	4,434	(1,249)	(28.2)
Changes in mortgage servicing rights fair value	618	(137)	755	551.1	4,714	(243)	4,957	(2,039.9)
Other	873	1,090	(217)	(19.9)	9,075	14,741	(5,666)	(38.4)
Total mortgage banking income (loss)	(2,113)	(2,712)	599	22.1	32,944	80,815	(47,871)	(59.2)
Other noninterest income	25,930	23,308	2,622	11.2	129	44	85	193.2
Total noninterest income	23,817	20,596	3,221	15.6	33,073	80,859	(47,786)	(59.1)
Noninterest expense	110,407	102,557	7,850	7.7	27,065	55,012	(27,947)	(50.8)
Income before income taxes	57,051	55,082	1,969	3.6	7,625	29,315	(21,690)	(74.0)
Provision for income taxes	14,090	14,933	(843)	(5.6)	2,777	7,569	(4,792)	(63.3)
Net income	$ 42,961	$ 40,149	$ 2,812	7.0 %	$ 4,848	$ 21,746	$ (16,898)	(77.7)%

HarborOne Bank Segment

Results of Operations for the Years Ended December 31, 2022 and 2021

Net Income. Bank net income for the year ended December 31, 2022 increased $2.8 million, or 7.0%, to $43.0 million from $40.1 million for the year ended December 31, 2021. Pre-tax income increased $2.0 million, or 3.6%, to $57.1 million as compared to $55.1 million in 2021.

Allowance for Credit Losses. Effective January 1, 2022, the Company adopted Accounting Standards Update No. 2016-13, commonly referred to as CECL, which requires the measurement of expected lifetime credit losses for financial assets measured at amortized cost, as well as unfunded commitments that are considered off-balance sheet credit exposures. CECL requires that the ACL be calculated based on current expected credit losses over the full remaining expected life of the financial assets and also consider expected future changes in macroeconomic conditions. Upon adoption of CECL on January 1, 2022, the Company's ACL on loans decreased by $1.3 million, and the ACL on unfunded commitments increased by $3.9 million for a net increase of $2.6 million. The after-tax impact of $1.9 million was recognized as a one-time, cumulative-effect adjustment that decreased retained earnings.

The Bank recorded a provision for credit losses of $5.7 million for the year ended December 31, 2022 which included a $4.7 million ACL on loans and a $996,000 ACL on unfunded commitments, reflecting provisioning for loan growth partially offset by a reduction in pandemic related uncertainty. The Bank recorded a reversal of provision for loan losses of $7.3 million for the year ended December 31, 2021. For the year ended December 31, 2022, the Bank recorded net charge-offs of $3.5 million compared to $2.8 million for the year ended December 31, 2021. Nonaccrual loans decreased to $14.8 million at December 31, 2022 from $36.1 million at December 31, 2021. The decrease in nonaccrual loans in 2022 primarily reflects the resolution of two large commercial credits.

Noninterest Income. Compared to the year ended December 31, 2021, total noninterest income for the year ended December 31, 2022 increased $3.2 million, or 15.6%, to $23.8 million from $20.6 million. The following table sets forth the components on non-interest income:

	Year Ended December 31,		Increase (Decrease)	
	2022	2021	Dollars	Percent
	(dollars in thousands)			
Intersegment loss	$ (3,604)	$ (3,665)	$ 61	1.7 %
Secondary market loan servicing fees, net of guarantee fees	873	1,090	(217)	(19.9)
Changes in mortgage servicing rights fair value	618	(137)	755	551.1
Total mortgage banking loss	(2,113)	(2,712)	599	22.1 %
Interchange fees	10,495	10,496	(1)	(0.0)
Other deposit account fees	8,770	7,343	1,427	19.4
Income on retirement plan annuities	456	427	29	6.8
Gain on sale and call of securities	—	241	(241)	(100.0)
Bank-owned life insurance income	1,981	2,022	(41)	(2.0)
Swap fee income	1,401	315	1,086	344.8
Other	2,827	2,464	363	14.7
Total noninterest income	$ 23,817	$ 20,596	$ 3,221	15.6 %

The primary reasons for the changes within the noninterest income categories shown in the preceding tables are noted below:

- The Bank records an intersegment loss on loans purchased from HarborOne Mortgage that is offset in consolidation. The Bank purchased $472.7 million residential mortgage loans from HarborOne Mortgage during 2022, as compared to $472.5 million during 2021.

- The change in the MSR fair value is generally consistent with the change in key benchmark residential mortgage rates. As interest rates rise and prepayment speeds decrease, MSR fair value tends to increase. Conversely, when interest rates fall and prepayment speeds increase, MSR fair value tends to decrease. The change in the MSR fair value was consistent with residential rate trends during 2022, positively impacting the fair value of the MSRs, partially offset by amortization related to principal payments.

- The increase in other deposit account fees reflects an increase in overdraft protection fees of $1.3 million.

- Swap fee income is collected and recorded at the time the swap contract is entered into, and therefore income fluctuates as a function of the swap agreements entered into in a period.

Noninterest Expense. Total noninterest expense for the year ended December 31, 2022 increased $7.9 million, or 7.7% to $110.4 million from $102.6 million for the year ended December 31, 2021. The following table sets forth the components on noninterest expense:

	Year Ended December 31,		Increase (Decrease)	
	2022	2021	Dollars	Percent
	(dollars in thousands)			
Compensation and benefits	$ 64,473	$ 57,471	$ 7,002	12.2 %
Occupancy and equipment	16,834	16,427	407	2.5
Data processing expenses	8,837	8,568	269	3.1
Loan expenses	353	1,191	(838)	(70.4)
Marketing	3,523	3,397	126	3.7
Deposit expenses	2,375	1,782	593	33.3
Postage and printing	1,513	1,479	34	2.3
Professional fees	4,446	4,151	295	7.1
Prepayment penalties on Federal Home Loan Bank advances	—	1,095	(1,095)	(100.0)
Foreclosed and repossessed assets	18	(398)	416	104.5
Deposit insurance	1,445	1,338	107	8.0
Other expenses	6,590	6,056	534	8.8
Total noninterest expense	$ 110,407	$ 102,557	$ 7,850	7.7 %

The primary reasons for the significant changes within the noninterest expense categories shown in the preceding table are noted below:

- The compensation and benefits increase reflects an increase in salary cost as a result of increased staffing levels at the Bank, the impact of annual salary increases and expenses related to the benefit accruals, and equity award acceleration in connection with the retirement of the Company's former CEO, James W. Blake.

- The increases in occupancy and equipment expense is due an increase utilities and software licenses.

- The decrease in loan expenses is consistent with the decrease in the consumer loan portfolio.

- The increase in deposit expense reflects check losses.

- The Bank paid $1.1 million prepayment penalty on FHLB borrowings of $20.0 million in 2021 and no such penalty in 2022.

- Other expenses in 2022 includes $875,000 for an agreement-in-principle to settle a purported class action lawsuit concerning overdraft fees on re-presented transactions and $75,000 for the related legal fees. The settlement remains subject to court approval.

HarborOne Mortgage Segment

Results of Operations for the Year Ended December 31, 2022 and 2021

Net Income. HarborOne Mortgage recorded a net income of $4.8 million for the year ended December 31, 2022, as compared to net income of $21.7 million for the year ended December 31, 2021. The HarborOne Mortgage segment's results are heavily impacted by prevailing mortgage rates, refinancing activity and home sales.

Noninterest Income. For the years ended December 31, 2022 and 2021, noninterest income totaled $32.9 million and $80.8 million, respectively. Noninterest income is primarily from mortgage banking income, for which the following table provides further detail:

	Year Ended December 31,		Increase (Decrease)	
	2022	2021	Dollars	Percent
	(dollars in thousands)			
Gain on sale of mortgage loans	$ 15,970	$ 61,883	$ (45,913)	(74.2)%
Intersegment gain	3,185	4,434	(1,249)	(28.2)
Processing, underwriting and closing fees	2,059	8,671	(6,612)	(76.3)
Secondary market loan servicing fees net of guarantee fees	7,016	6,070	946	15.6
Changes in mortgage servicing rights fair value	4,714	(243)	4,957	NM
Total mortgage banking income	$ 32,944	$ 80,815	$ (47,871)	(59.2)%
Originated mortgage servicing rights included in gain on sale of mortgage loans	$ 4,539	$ 13,796	$ (9,257)	(67.1)%
Change in 10-year Treasury Constant Maturity rate in basis points	236	59		

For the years ended December 31, 2022 and 2021, HarborOne Mortgage closed $1.02 billion and $2.46 billion, respectively, of residential mortgage loans. The following tables provide additional loan production detail:

	Year Ended December 31,			
	2022		2021	
	Loan Amount	% of Total	Loan Amount	% of Total
	(dollars in thousands)			
Product Type				
Conventional	$ 495,259	48.4 %	$ 1,677,882	68.4 %
Government	52,997	5.2	160,958	6.6
State Housing Agency	42,226	4.1	77,251	3.1
Jumbo	433,406	42.3	538,565	21.9
Seconds	326	0.0	620	—
Total	$ 1,024,214	100.0 %	$ 2,455,276	100.0 %
Purpose				
Purchase	$ 800,516	78.2 %	$ 1,094,148	44.6 %
Refinance	186,397	18.2	1,321,241	53.8
Construction	37,301	3.6	39,887	1.6
Total	$ 1,024,214	100.0 %	$ 2,455,276	100.0 %

The primary reason for the changes within the noninterest income categories shown in the preceding tables are noted below:

- The change in the MSR fair value is generally consistent with the change in key benchmark residential mortgage rates. As interest rates rise and prepayment speeds decrease, MSR fair value tends to increase. Conversely, when interest rates fall and prepayment speeds increase, MSR fair value tends to decrease. The change in the MSR fair value was consistent with residential rate trends during 2022, positively impacting the fair value of the MSRs in the amount of $7.1 million, partially offset by amortization related to principal payments. Amortization related to payoffs decreased approximately 50.8% for the year ended December 31, 2022, as compared to the same period in 2021.

- HarborOne Mortgage records an intersegment gain on loans sold to the Bank that is offset in consolidation. The Bank purchased $472.7 million residential mortgage loans from HarborOne Mortgage during 2022, as compared to $472.5 million during 2021. The year-over-year decrease in intersegment gain reflects decreased sales margins in 2022.

- Gain on sale of mortgage loans decreased $45.9 million, or 74.2%, due to tighter margins and decreased residential mortgage demand as a result of decreased refinance activity in 2022 as mortgage interest rates rapidly increased.

- Processing, underwriting and closing fees decreased, due to volume decreases.

- Secondary market loan servicing fees, net of guarantee fees, increased consistent with an increase in the average balance of the serviced portfolio. The unpaid balance of the servicing portfolio totaled $3.31 billion and $3.28 billion at December 31, 2022 and 2021, respectively.

Noninterest Expense. Noninterest expense decreased $27.9 million, or 50.8%, to $27.1 million for the year ended December 31, 2022 from $55.0 million. The following table sets forth the components on noninterest expense:

	Year Ended December 31,		Increase (Decrease)	
	2022	2021	Dollars	Percent
	(dollars in thousands)			
Compensation and benefits	$ 19,799	$ 44,415	$ (24,616)	(55.4)%
Occupancy and equipment	2,757	2,986	(229)	(7.7)
Data processing expenses	333	507	(174)	(34.3)
Loan expenses	1,034	4,549	(3,515)	(77.3)
Marketing	393	247	146	59.1
Postage and printing	64	99	(35)	(35.4)
Professional fees	599	1,471	(872)	(59.3)
Other expenses	2,086	738	1,348	182.7
Total noninterest expense	$ 27,065	$ 55,012	$ (27,947)	(50.8)%

The primary reason for the changes within the noninterest expense categories shown in the preceding tables are noted below:

- The decrease in compensation and benefits primarily reflects the commission expense decrease consistent with the changes in mortgage origination volumes and decreased staffing levels. Full time equivalent employees decreased 37 year-over-year.

- Occupancy and equipment expense decreased due to a decrease in loan offices.

- Loan expense primarily is for expenses to originate loans and is generally consistent with mortgage origination volumes.

- The decrease in professional fees primarily reflects expenses for outsourced quality control services and mortgage consulting services that were utilized in 2021.

- The increase in other expenses reflects increased intercompany fees, cloud-computing expenses, and employment agency fees.

Asset Quality

The following table provides information with respect to our nonperforming assets and troubled debt restructurings at the dates indicated. We did not have any accruing loans past due 90 days or more at the dates presented.

	December 31, 2022	December 31, 2021	December 31, 2020
	(dollars in thousands)		
Non-accrual loans:			
Residential real estate:			
One- to four-family	$ 8,927	$ 11,210	$ 11,611
Second mortgages and equity lines of credit	421	600	834
Commercial real estate	2,039	20,053	12,486
Commercial construction	—	—	—
Commercial and industrial	3,329	4,114	8,606
Consumer	70	156	564
Total non-accrual loans [1]	14,786	36,133	34,101
Other real estate owned and repossessed assets:			
One- to four-family residential real estate owned	—	—	297
Other repossessed assets	54	53	298
Total nonperforming assets	14,840	36,186	34,696
Performing troubled debt restructurings	8,821	10,003	11,652
Total nonperforming assets and performing troubled debt restructurings	$ 23,661	$ 46,189	$ 46,348
Period end allowance for credit losses balance	45,236	45,377	55,395
Period end total loan balance	4,549,670	3,607,733	3,494,642
Allowance for credit losses to total loans	0.99 %	1.26 %	1.59 %
Allowance for credit losses to non-accrual loans	305.94 %	125.58 %	162.44 %
Total nonperforming loans to total loans [2]	0.32 %	1.00 %	0.98 %
Total nonperforming assets and performing troubled debt restructurings to total assets	0.44 %	1.01 %	1.03 %
Total nonperforming assets to total assets	0.28 %	0.79 %	0.77 %

(1) $2.9 million and $1.0 million of troubled debt restructurings are included in total non-accrual loans at December 31, 2022 and 2021, respectively.

(2) Total loans are presented before allowance for credit losses, but include deferred loan origination costs (fees), net.

Credit quality performance has remained strong, with total nonperforming assets of $14.8 million at December 31, 2022, compared to $36.2 million at December 31, 2021. Nonperforming assets as a percentage of total assets were 0.28% and 0.79%, at December 31, 2022 and 2021, respectively. During 2022, two large commercial credits were fully resolved, reducing nonperforming assets significantly.

While the level of disruption caused by, and the economic impact of, COVID-19 has lessened significantly, other factors have been affecting the economic environment in 2022 including geopolitical conflict, supply chain disruptions, inflation, and rising interest rates. While the ultimate impact of these other factors on the Company's loan and lease portfolio remains difficult to predict, the continued uncertainty regarding inflation, interest rates and the related economic effects on credit quality could continue to affect the accounting for credit losses.

Management identified five sectors as the most susceptible to increased credit risk at the outset of the COVID-19 pandemic: retail, office space, hotels, restaurants, and recreation. Management continues to monitor certain credit types within those sectors that may be susceptible to increased credit risk as a result of trends that were precipitated by the COVID-19 pandemic and may be exacerbated by current economic conditions. Management is focused on business-oriented hotels, non-anchored retail space, and metro office space. As of December 31, 2022, business-oriented hotels included 12 loans with a total outstanding balance of $86.0 million, non-anchored retail space included 28 loans with a total outstanding balance of $40.5 million, and metro office space included two loans with a total outstanding balance of $14.9 million. As of December 31, 2022, there was one business-oriented hotel credit with a carrying value of $2.1 million that was rated substandard and on non-accrual. This credit was provided a principal deferral that resulted in a troubled debt restructuring ("TDR") designation in the third quarter of 2022. The other loans in these groups were performing in accordance with their terms.

Management employs a process and methodology to estimate the ACL on loans that evaluates both quantitative and qualitative factors. The methodology for evaluating quantitative factors consists of two basic components. The first component involves pooling loans into portfolio segments for loans that share similar risk characteristics. A DCF methodology is used to estimate credit losses for each pooled portfolio segment. The methodology incorporates the probability of default and loss given default. Management utilizes the national unemployment rate as an econometric factor with a one-year forecast period and one-year straight-line reversion period to its historical mean in order to estimate the probability of default for each loan portfolio segment. Utilizing a third-party regression model, the forecasted national unemployment rate is correlated with the probability of default for each loan portfolio segment. The DCF methodology combines the probability of default, the loss given default, maturity date and prepayment speeds to estimate a reserve for each loan. The sum of all the loan level reserves are aggregated for each portfolio segment and a loss rate factor is derived. Quantitative loss factors for pooled loans are also supplemented by certain qualitative risk factors reflecting Management's view of how losses may vary from those represented by quantitative loss rates.

The second component involves individually analyzed loans that do not share similar risk characteristics with loans that are pooled into portfolio segments. For loans that are individually analyzed, the ACL is measured using a DCF methodology based upon the loan's contractual effective interest rate, or at the loan's observable market price, or, if the loan is collateral-dependent, at the fair value of the collateral.

The ACL was $45.2 million, or 0.99% of total loans, at December 31, 2022, compared to $45.4 million, or 1.26% of total loans, at December 31, 2021. The ACL on individually analyzed loans amounted to $203,000. The ACL on unfunded commitments, included in other liabilities on the Consolidated Balance Sheets, amounted to $4.9 million at December 31, 2022, and there was no ACL on unfunded commitments at December 31, 2021.

The following table sets forth the breakdown of the allowance for credit losses on loans by loan category at the dates indicated:

	December 31, 2022								
	2022			2021			2020		
	Amount	% of Allowance Amount to Total Allowance	% of Loans in Category to Total Loans	Amount	% of Allowance Amount to Total Allowance	% of Loans in Category to Total Loans	Amount	% of Allowance Amount to Total Allowance	% of Loans in Category to Total Loans
	(dollars in thousands)								
Residential real estate:									
One- to four-family	$ 11,532	25.49 %	31.48 %	$ 3,631	8.00 %	29.04 %	$ 6,152	11.11 %	26.58 %
Second mortgages and equity lines of credit	924	2.04	3.65	420	0.93	3.79	1,072	1.93	4.17
Residential construction	280	0.62	0.79	69	0.15	0.93	195	0.35	0.89
Commercial real estate	20,357	45.00	49.46	33,242	73.26	47.12	34,765	62.76	44.39
Commercial construction	4,645	10.27	4.38	2,010	4.43	3.79	1,955	3.53	2.84
Commercial and industrial	7,236	16.00	9.33	4,638	10.22	11.69	5,311	9.59	13.29
Consumer	262	0.58	0.91	367	0.81	3.64	2,475	4.47	7.84
Total general and allocated allowance	45,236	100.00	100.00 %	44,377	97.80	100.00 %	51,925	93.74	100.00 %
Unallocated	—	0.00		1,000	2.20		3,470	6.26	
Total	$ 45,236	100.00 %		$ 45,377	100.00 %		$ 55,395	100.00 %	

The following table sets forth net charge-offs (recoveries) and the ratio of annualized net charge-offs (recoveries) to average loans for the periods indicated:

	Year Ended December 31,								
	2022			2021			2020		
	Average Balance	Net Charge-offs (Recoveries)	Net Charge-off (Recovery) Rate	Average Balance	Net Charge-offs (Recoveries)	Net Charge-off (Recovery) Rate	Average Balance	Net Charge-offs (Recoveries)	Net Charge-off (Recovery) Rate
	(dollars in thousands)								
Residential real estate:									
One- to four-family	$ 1,210,259	$ (2)	(0.00)%	$ 942,286	$ (218)	(0.02)%	$ 942,524	$ (167)	(0.02)%
Second mortgages and equity lines of credit	150,078	(117)	(0.08)%	137,041	(160)	(0.12)%	152,857	(113)	(0.07)%
Residential real estate construction	37,853	—	— %	31,513	—	— %	21,220	—	— %
Total residential real estate loans	$ 1,398,190	$ (119)	(0.01)%	$ 1,110,840	$ (378)	(0.03)%	$ 1,116,601	$ (280)	(0.03)%
Commercial:									
Commercial real estate	$ 2,018,006	$ 4,926	0.24 %	$ 1,568,673	$ 400	0.03 %	$ 1,307,556	$ 1,239	0.09 %
Commercial construction	169,777	—	— %	123,025	—	— %	185,159	937	0.51 %
Commercial and industrial	305,863	(1,310)	(0.43)%	458,324	2,728	0.60 %	420,589	1,218	0.29 %
Total commercial loans	$ 2,493,646	$ 3,616	0.15 %	$ 2,150,022	$ 3,128	0.15 %	$ 1,913,304	$ 3,394	0.18 %
Total Consumer loans	$ 78,766	$ (3)	(0.00)%	$ 192,841	$ 10	0.01 %	$ 353,412	$ 366	0.10 %
Total loans	$ 3,970,602	$ 3,494	0.09 %	$ 3,453,703	$ 2,760	0.08 %	$ 3,383,317	$ 3,480	0.10 %

The Bank recorded a provision for credit losses of $5.7 million for the year ended December 31, 2022, which included a $4.7 million ACL on loans and a $996,000 ACL on unfunded commitments, reflecting provisioning for loan growth partially offset by a reduction in pandemic related uncertainty. For the year ended December 31, 2021, we recorded a reversal of provision for loan losses of $7.3 million. The provision for credit losses is impacted by specific reserves, charge-offs, changes in historical charge-off trends, and adjusted for Management's assessment of certain qualitative factors including, loan portfolio growth and composition changes, ongoing evaluations of credit quality trends and current economic conditions.

Net charge-offs totaled $3.5 million, or 0.09% of average loans outstanding for the year ended December 31, 2022 as compared to $2.8 million, or 0.08%, for the year ended December 31, 2021. The commercial real estate charge-offs and commercial and industrial recoveries in 2022 were primarily related to three separate large credits, of which two were fully resolved in 2022.

Management of Market Risk

The principal market risk facing the Company is interest-rate risk. The Company's Asset/Liability Committee ("ALCO") establishes exposure limits that govern the Company's tolerance for interest-rate risk. The policy limits and guidelines serve as benchmarks for measuring interest-rate risk and for providing a framework for evaluation and interest-rate risk-management decision-making. The Company's primary measure of its interest-rate risk is an income simulation model and an economic value of equity analysis.

Net Interest Income Analysis. The Company uses income simulation as the primary tool for measuring interest-rate risk inherent in our balance sheet at a given point in time by showing the effect on net interest income, over specified time frames, of instantaneous parallel shifts in market rates. For simulation purposes, the Company's balance sheet is assumed to remain static over the simulation horizon. The model results are dependent on material assumptions. These assumptions include, but are not limited to, Management's best assessment of the effect of changing interest rates on the prepayment speeds of certain assets and liabilities, projections for account balances in each of the product lines offered and the historical behavior of deposit rates and balances in relation to changes in interest rates (deposit betas). These assumptions are inherently changeable, and as a result, the model is not expected to precisely measure net interest income or precisely predict the impact of fluctuations in interest rates on net interest income. Actual results will differ from the simulated results due to timing, magnitude, and frequency of interest rate changes as well as changes in the balance sheet composition and market conditions. Assumptions are supported with quarterly back-testing of the model to actual market rate shifts.

The table below sets forth, as of December 31, 2022 and 2021, the net interest income simulation results that estimate the impact of interest rate changes on the Company's estimated net interest income over year one and year two time horizons:

Changes in Interest Rates (basis points) [1]	Change in Net Interest Income (% change from year one base) December 31, 2022 Year One	December 31, 2022 Year Two	December 31, 2021 Year One	December 31, 2021 Year Two
+300	(10.4)%	(6.5)%	2.8 %	10.2 %
+200	(6.6)%	(3.6)%	2.3 %	8.1 %
+100	(3.2)%	(1.4)%	1.4 %	4.9 %
-100	2.5 %	0.4 %	(7.4)%	(14.3)%

[1] The calculated change in net interest income assumes an instantaneous parallel shift of the yield curve.

As of December 31, 2022, our models, as indicated above, show a decline in our net interest income in rising rate scenarios and an increase in our net interest income in falling rate scenarios. While the ALCO reviews and updates simulation assumptions and periodically back-tests the simulation results, income simulation may not always prove to be an accurate indicator of interest rate risk. If market competition prompts the Company to raise deposit rates more quickly, or results in reliance on higher-cost brokered deposits or other funding sources than is assumed in the simulation analysis, without an equivalent increase in interest rates on assets, net interest income would be negatively affected. Alternatively, net interest income would be positively affected if the Company were able to lag increases in deposit rates to a slower pace than the upward repricing of its loans. Additionally, historically unusual market conditions may result in market behavior that is not anticipated in our model, resulting in actual results that vary significantly from the simulated results of the model.

Economic Value of Equity Analysis. The Bank also uses the net present value of equity at risk, or "EVE," methodology. This methodology calculates the difference between the present value of expected cash flows from assets and liabilities. The comparative scenarios assume an immediate parallel shift in the yield curve up 100, 200, and 300 basis points and down 100 basis points.

The table below sets forth, as of December 31, 2022, the estimated changes in the EVE that would result from an instantaneous parallel shift in interest rates. Computations of prospective effects of hypothetical interest rate changes are based on numerous assumptions, including relative levels of market interest rates, loan prepayments and deposit decay, and should not be relied upon as indicative of actual results.

At December 31, 2022					
		Estimated Increase (Decrease) in EVE		EVE as a Percentage of Economic Value of Assets	
Changes in Interest Rates (basis points) [1]	Estimated EVE	Amount	Percent	EVE Ratio [2]	Changes in Percent
		(dollars in thousands)			
+ 300	$ 596,491	$ (218,552)	(26.8)%	13.0 %	(3.2)%
+ 200	684,835	(130,208)	(16.0)	14.4	(1.7)
+ 100	758,377	(56,666)	(7.0)	15.5	(0.7)
0	815,043	—	—	16.2	—
- 100	850,078	35,035	4.3	16.3	0.2

[1] Assumes instantaneous parallel changes in interest rates.
[2] EVE Ratio represents EVE divided by the economic value of assets.

The Board of Directors and Management review the methodology's measurements for both net interest income and EVE on a quarterly basis to determine whether the exposure resulting from the changes in interest rates remains within established tolerance levels and develops appropriate strategies to manage this exposure.

Liquidity Management and Capital Resources

Liquidity measures the Company's ability to meet both current and future financial obligations of a short- and long-term nature. Our primary sources of funds consist of deposit inflows, loan repayments, maturities and sales of securities, and borrowings from the FHLB. While maturities and scheduled amortization of loans and securities are predictable sources of funds, deposit flows, calls of investment securities and borrowed funds and prepayments on loans are greatly influenced by general interest rates, economic conditions and competition.

The objective of our liquidity risk management process is to manage cash flow and liquidity in an effort to provide continuous access to sufficient, reasonably priced funds. Funding requirements are impacted by loan originations and refinancings, deposit balance changes, liability issuances and settlements, and off-balance sheet funding commitments. We consider and comply with various regulatory guidelines regarding required liquidity levels and periodically monitor our liquidity position in light of the changing economic environment and customer activity. Based on periodic liquidity assessments, we may alter our asset, liability, and off-balance sheet positions. Management regularly adjusts our investments in liquid assets based upon an assessment of (i) expected loan demand, (ii) expected deposit flows, (iii) yields available on interest-earning deposits and securities, and (iv) the objectives of our interest rate risk and investment policies.

We have access to immediate liquid resources in the form of cash which is primarily on deposit with FRBB. Potential sources of liquidity also include investment securities in our available-for-sale securities portfolio and our ability to sell loans in the secondary market. Our core deposits have historically provided us with a long-term source of stable and relatively lower cost source of funding. Additional funding is available through the issuance of long-term debt or equity.

Maturities and payments on outstanding loans and investment securities also provide a steady flow of funds. Liquidity is further enhanced by our ability to pledge loans to access secured borrowings from the FHLB and FRBB. As of December 31, 2022, we had additional borrowing capacity of $797.4 million from the FHLB and $64.2 million from the FRBB based on the amount of collateral pledged. We also have additional borrowing capacity under a $25.0 million unsecured federal funds line with a correspondent bank.

We continued our focus on maintaining a strong liquidity position throughout 2022. As of December 31, 2022, cash and cash equivalents were $98.0 million, the carrying value of our available-for-sale investment securities was $301.1 million, and total deposits were $4.19 billion.

The Company and the Bank are subject to various regulatory capital requirements. At December 31, 2022, the Company and the Bank exceeded all regulatory capital requirements and was considered "well capitalized" under regulatory guidelines. See "*Supervision and Regulation—Capital Adequacy and Safety and Soundness—Regulatory Capital Requirements*" and Note 17 of the Notes to Consolidated Financial Statements.

Off-Balance Sheet Arrangements, Credit Commitments, and Contractual Obligations

We are a party to financial instruments with off-balance sheet risk in the normal course of business to meet the financing needs of our customers. These financial instruments include commitments to extend credit, which involve elements of credit and interest rate risk in excess of the amount recognized in the accompanying Consolidated Balance Sheets. The contract amount of these instruments reflects the extent of involvement we have in these particular classes of financial instruments. We use the same credit policies in making commitments as we do for on-balance sheet instruments. Our exposure to credit loss is represented by the contractual amount of the instruments. 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 and unadvanced funds on lines-of-credit generally have fixed expiration dates and may expire without being drawn upon. Therefore, the total commitment amount does not necessarily represent future cash requirements. We evaluate each customer's creditworthiness on a case-by-case basis. In addition, we enter into commitments to sell loans that we originate.

At December 31, 2022, we had outstanding commitments to originate loans of $101.6 million and unadvanced funds on loans of $866.1 million. We anticipate that we will have sufficient funds available to meet our current loan origination commitments. Certificates of deposit that are scheduled to mature in less than one year from December 31, 2022 totaled $571.5 million. Management expects, based on historical experience, that a substantial portion of the maturing certificates of deposit will be renewed. However, if a substantial portion of these deposits is not retained, we may use FHLB advances, brokered deposits, or raise interest rates on deposits to attract new accounts, which may result in higher levels of interest expense.

There are no other off-balance sheet arrangements that have or are reasonably likely to have a current or future effect on the Company's financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources that is material to investors. For additional information, see Note 12 of the Notes to Consolidated Financial Statements.

Non-GAAP Financial Measures and Reconciliation to GAAP

In addition to results presented in accordance with generally accepted accounting principles, this Form 10-K contains certain non-GAAP financial measures. Management believes that the supplemental non-GAAP information, which consists of the tangible-common-equity-to-tangible-assets ratio, is utilized by regulators and market analysts to evaluate a company's financial condition and therefore, such information is useful to investors. These disclosures should not be viewed as a substitute for financial results determined in accordance with GAAP, nor are they necessarily comparable to non-GAAP performance measures which may be presented by other companies. Because non-GAAP financial measures are not standardized, it may not be possible to compare these financial measures with other companies' non-GAAP financial measures having the same or similar names.

The following table reconciles the Company's tangible-common-equity-to-tangible-assets ratio for the periods indicated:

	December 31,	
	2022	2021
(dollars on thousands)		
Tangible common equity:		
Total stockholders' equity	$ 616,976	$ 679,261
Less: Goodwill	69,802	69,802
Less: Other intangible assets [1]	2,272	3,164
Tangible common equity	$ 544,902	$ 606,295
Tangible assets:		
Total assets	$ 5,359,545	$ 4,553,405
Less: Goodwill	69,802	69,802
Less: Other intangible assets	2,272	3,164
Tangible assets	$ 5,287,471	$ 4,480,439
Tangible common equity / tangible assets [2]	10.31 %	13.53 %

[1] Other intangible assets are core deposit intangibles.
[2] This non-GAAP ratio is total stockholders' equity less goodwill and intangible assets to total assets less goodwill and intangible assets.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Information regarding quantitative and qualitative disclosures about market risk appears under Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" under the caption "Management of Market Risk."

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements

Crowe LLP
Independent Member Crowe Global

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Stockholders and the Board of Directors of HarborOne Bancorp, Inc.
Brockton, Massachusetts

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying consolidated balance sheets of HarborOne Bancorp, Inc. (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of income, comprehensive income, changes in stockholders' equity, and cash flows for each of the years in the three year period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). We also have audited the Company's internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework: (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2022 and 2021 and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2022 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control – Integrated Framework: (2013) issued by COSO.

Explanatory Paragraph – Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, Company has changed its method of accounting for credit losses effective January 1, 2022 due to the adoption of Financial Accounting Standards Board (FASB) Accounting Standards Codifications No. 326, Financial Instruments – Credit Losses (Topic 326). The Company adopted the new credit loss standard using the modified retrospective method such that prior period amounts are not adjusted and continue to be reported in accordance with previously applicable generally accepted accounting principles.

Basis for Opinions

The Company's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Controls over Financial Reporting. Our responsibility is to express an opinion on the Company's financial statements and an opinion on the Company's internal control over financial reporting 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the financial statements included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of the critical audit matter does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Allowance for Credit Losses – Qualitative Factors

The allowance for credit losses ("ACL") is an accounting estimate of expected credit losses over the contractual life of financial assets carried at amortized cost. Refer to Note 1 – Summary of Significant Accounting Policies for the Company's accounting policy related to the ACL and Note 4 – Loans and Allowance for Credit Losses for the Company's disclosures related to loans and the associated ACL. The Company has identified the ACL as a critical accounting estimate.

Management employs a process and methodology to estimate the ACL that evaluates both quantitative and qualitative factors. The methodology for evaluating quantitative factors involves pooling loans into portfolio segments for loans that share similar risk characteristics.

For pooled loans, the Company utilizes a discounted cash flow ("DCF") methodology to estimate credit losses over the expected life of the loan. The DCF methodology combines the probability of default, the loss given default, remaining life of the loan and prepayment speed assumptions to estimate a reserve for each loan. The loss rates are adjusted by current and forecasted econometric assumptions. These quantitative loss factors are also supplemented by certain qualitative risk factors reflecting management's view of how losses may vary from those represented by quantitative loss rates. Qualitative factors considered by management include changes in the nature and volume of the portfolio and mix of loans; changes in international, national, regional and local economic conditions; changes in the quality of the Company's loan review system, changes in the value of underlying collateral; and the existence and effect of any concentrations of credit and changes in such concentrations. Changes in these assumptions could have a material effect on the Company's financial results.

Management's determination of qualitative factors involves significant judgment. Evaluating management's judgments in their determination of these qualitative factors required a high degree of auditor effort and judgment. Therefore, we considered auditing the qualitative factors to be a critical audit matter due to the subjective nature of the qualitative factors, the resulting measurement uncertainty, and the significance of the portion of the allowance for credit losses determined through qualitative factors

The primary procedures we performed to address this critical audit matter included:

- Testing the effectiveness of internal controls over management's allowance for credit losses qualitative factors calculation including controls over:
    - o Completeness and accuracy of the data used in the determination of the qualitative factors.
    - o The mathematical accuracy of the allowance for loan loss calculation, including qualitative factors.
    - o Reasonableness of judgments and significant assumptions used in the development of the qualitative factors.
- Substantively testing management's process to estimate the allowance for credit losses qualitative factors calculation Including testing:
    - o Testing the completeness and accuracy of the data utilized in the determination of the qualitative factors.
    - o Testing the mathematical accuracy of the allowance for loan loss calculation, including qualitative factors.
    - o The reasonableness of management's judgments and significant assumptions used in the development of the qualitative factors.

Crowe LLP

Crowe LLP

We have served as the Company's auditor since 2020.

Livingston, New Jersey
March 9, 2023

HarborOne Bancorp, Inc.
Consolidated Balance Sheets

(in thousands, except share data)	December 31, 2022	December 31, 2021
Assets		
Cash and due from banks	$ 39,712	$ 35,549
Short-term investments	58,305	159,170
Total cash and cash equivalents	98,017	194,719
Securities available for sale, at fair value	301,149	394,036
Securities held to maturity, at amortized cost (fair value of $19,274 at December 31, 2022)	19,949	—
Federal Home Loan Bank stock, at cost	20,071	5,931
Asset held for sale	—	881
Loans held for sale, at fair value	18,544	45,642
Loans	4,549,670	3,607,733
Less: Allowance for credit losses on loans	(45,236)	(45,377)
Net loans	4,504,434	3,562,356
Accrued interest receivable	15,139	10,624
Mortgage servicing rights, at fair value	48,138	38,268
Property and equipment, net	49,045	50,745
Retirement plan annuities	14,630	14,174
Bank-owned life insurance	91,953	89,972
Goodwill	69,802	69,802
Intangible assets	2,272	3,164
Other assets	106,402	73,091
Total assets	$ 5,359,545	$ 4,553,405
Liabilities and Stockholders' Equity		
Deposits:		
Demand deposit accounts	$ 762,576	$ 743,051
NOW accounts	297,692	313,733
Regular savings and club accounts	1,468,172	1,138,979
Money market deposit accounts	861,704	858,970
Term certificate accounts	799,355	627,916
Total deposits	4,189,499	3,682,649
Short-term borrowed funds	385,000	—
Long-term borrowed funds	15,675	55,711
Subordinated debt	34,285	34,159
Mortgagors' escrow accounts	9,537	8,459
Accrued interest payable	2,325	1,083
Other liabilities and accrued expenses	106,248	92,083
Total liabilities	4,742,569	3,874,144
Commitments and contingencies (Notes 7, 12 and 13)		
Common stock, $0.01 par value; 150,000,000 shares authorized; 60,061,527 and 59,087,487 shares issued; 48,961,452 and 52,390,478 shares outstanding at December 31, 2022 and 2021, respectively	596	585
Additional paid-in capital	483,031	469,934
Retained earnings	356,438	325,699
Treasury stock, at cost, 11,100,075 and 6,693,504 shares at December 31, 2022 and 2021, respectively	(148,384)	(85,859)
Accumulated other comprehensive loss	(47,082)	(1,637)
Unearned compensation - ESOP	(27,623)	(29,461)
Total stockholders' equity	616,976	679,261
Total liabilities and stockholders' equity	$ 5,359,545	$ 4,553,405

The accompanying notes are an integral part of these Consolidated Financial Statements.

HarborOne Bancorp, Inc.

Consolidated Statements of Income

(in thousands, except share data)	Year Ended December 31, 2022	2021	2020
Interest and dividend income:			
Interest and fees on loans	$ 162,340	$ 135,823	$ 137,765
Interest on loans held for sale	1,306	3,342	3,892
Interest on taxable securities	7,590	4,212	5,510
Interest on non-taxable securities	—	—	103
Other interest and dividend income	694	518	1,288
Total interest and dividend income	171,930	143,895	148,558
Interest expense:			
Interest on deposits	15,630	8,723	22,793
Interest on FHLB borrowings	5,219	1,707	3,604
Interest on subordinated debentures	2,095	2,095	2,095
Total interest expense	22,944	12,525	28,492
Net interest and dividend income	148,986	131,370	120,066
Provision (benefit) for credit losses	5,660	(7,258)	34,815
Net interest and dividend income, after provision (benefit) for credit losses	143,326	138,628	85,251
Noninterest income:			
Mortgage banking income:			
Gain on sale of mortgage loans	15,970	61,883	105,469
Changes in mortgage servicing rights fair value	5,332	(380)	(6,732)
Other	9,948	15,831	15,172
Total mortgage banking income	31,250	77,334	113,909
Deposit account fees	19,265	17,839	14,018
Income on retirement plan annuities	456	427	414
Gain on sale and call of securities, net	—	241	2,533
Bank-owned life insurance income	1,981	2,022	2,215
Other income	4,357	2,823	5,591
Total noninterest income	57,309	100,686	138,680
Noninterest expense:			
Compensation and benefits	83,273	101,924	105,615
Occupancy and equipment	19,767	19,646	17,841
Data processing	9,170	9,154	8,811
Loan expenses	1,387	5,740	9,810
Marketing	3,916	3,644	3,390
Deposit expenses	2,375	1,782	1,874
Postage and printing	1,610	1,620	1,819
Professional fees	6,122	5,875	5,456
Prepayment penalties on Federal Home Loan Bank advances	—	1,095	—
Foreclosed and repossessed assets	18	(398)	(4)
Deposit insurance	1,445	1,338	1,180
Other expenses	9,823	7,442	10,130
Total noninterest expense	138,906	158,862	165,922
Income before income taxes	61,729	80,452	58,009
Income tax provision	16,140	21,935	13,217
Net income	$ 45,589	$ 58,517	$ 44,792
Earnings per common share:			
Basic	$ 0.98	$ 1.15	$ 0.82
Diluted	$ 0.97	$ 1.14	$ 0.82
Weighted average shares outstanding:			
Basic	46,483,664	50,746,302	54,313,368
Diluted	47,118,457	51,523,135	54,319,835

The accompanying notes are an integral part of these Consolidated Financial Statements.

HarborOne Bancorp, Inc.

Consolidated Statements of Comprehensive Income

(in thousands)	Year Ended December 31, 2022	2021	2020
Net income	$ 45,589	$ 58,517	$ 44,792
Other comprehensive income:			
Unrealized gain/loss on cash flow hedge:			
Unrealized holding gains (losses)	7,815	2,557	(1,453)
Reclassification adjustment for net losses (gains) included in net income	(1,164)	513	46
Net change in unrealized gains (losses) on derivatives in cash flow hedging instruments	6,651	3,070	(1,407)
Related tax effect	(1,868)	(860)	394
Net-of-tax amount	4,783	2,210	(1,013)
Unrealized gain/loss on securities available for sale:			
Unrealized holding (losses) gains	(64,620)	(7,496)	4,214
Reclassification of unrealized gain on securities transferred to available for sale	—	—	522
Reclassification adjustment for net realized gains	—	(241)	(2,533)
Net unrealized (losses) gains	(64,620)	(7,737)	2,203
Related tax effect	14,242	1,705	(485)
Net-of-tax amount	(50,378)	(6,032)	1,718
Postretirement benefit:			
Adjustment of accumulated obligation for postretirement benefits	251	—	—
Reclassification adjustment for gains recognized in net periodic benefit cost	(42)	—	—
Net gains	209	—	—
Related tax effect	(59)	—	—
Net-of-tax amount	150	—	—
Total other comprehensive (loss) income	(45,445)	(3,822)	705
Comprehensive income	$ 144	$ 54,695	$ 45,497

The accompanying notes are an integral part of these Consolidated Financial Statements.

HarborOne Bancorp, Inc.

Consolidated Statements of Changes in Stockholders' Equity

(in thousands, except share data)	Common Stock Outstanding Shares	Common Stock Amount	Additional Paid-in Capital	Retained Earnings	Treasury Stock, at Cost	Accumulated Other Comprehensive Income (Loss)	Unearned Compensation - ESOP	Total Stockholders' Equity
Balance at December 31, 2019	58,418,021	$ 584	$ 460,232	$ 237,356	$ (721)	$ 1,480	$ (33,137)	$ 665,794
								—
Comprehensive income	—	—	—	44,792	—	705	—	45,497
Dividends declared of $0.09 per share	—	—	—	(4,836)	—	—	—	(4,836)
ESOP shares committed to be released (230,723 shares)	—	—	265	—	—	—	1,838	2,103
Restricted stock awards granted, net of forfeitures	345,748	—	—	—	—	—	—	—
Share-based compensation expense	—	—	3,679	—	—	—	—	3,679
Treasury stock purchased	(1,558,311)	—	—	—	(15,923)	—	—	(15,923)
Balance at December 31, 2020	57,205,458	$ 584	$ 464,176	$ 277,312	$ (16,644)	$ 2,185	$ (31,299)	$ 696,314
Comprehensive income (loss)	—	—	—	58,517	—	(3,822)	—	54,695
Dividends declared of $0.20 per share	—	—	—	(10,130)	—	—	—	(10,130)
ESOP shares committed to be released (230,722 shares)	—	—	1,332	—	—	—	1,838	3,170
Restricted stock awards granted, net of forfeitures	186,172	—	—	—	—	—	—	—
Share-based compensation expense	—	—	3,784	—	—	—	—	3,784
Stock options exercised	62,840	1	642	—	—	—	—	643
Treasury stock purchased	(5,063,992)	—	—	—	(69,215)	—	—	(69,215)
Balance at December 31, 2021	52,390,478	$ 585	$ 469,934	$ 325,699	$ (85,859)	$ (1,637)	$ (29,461)	$ 679,261
Cumulative effect of change in accounting principle - ASC 326	—	—	—	(1,884)	—	—	—	(1,884)
Comprehensive income (loss)	—	—	—	45,589	—	(45,445)	—	144
Dividends declared of $0.28 per share	—	—	—	(12,966)	—	—	—	(12,966)
ESOP shares committed to be released (230,723 shares)	—	—	1,440	—	—	—	1,838	3,278
Restricted stock awards granted, net of forfeitures	94,141	—	—	—	—	—	—	—
Performance stock units vested	14,596	—	—	—	—	—	—	—
Share-based compensation expense	—	2	3,303	—	—	—	—	3,305
Stock options exercised	868,808	9	8,354	—	—	—	—	8,363
Treasury stock purchased	(4,406,571)	—	—	—	(62,525)	—	—	(62,525)
Balance at December 31, 2022	48,961,452	$ 596	$ 483,031	$ 356,438	$ (148,384)	$ (47,082)	$ (27,623)	$ 616,976

The accompanying notes are an integral part of these Consolidated Financial Statements.

HarborOne Bancorp, Inc.

Consolidated Statements of Cash Flows

(in thousands)	Year Ended December 31, 2022	2021	2020
Cash flows from operating activities:			
Net income	$ 45,589	$ 58,517	$ 44,792
Adjustments to reconcile net income to net cash used by operating activities:			
Provision (benefit) for credit losses	5,660	(7,258)	34,815
Net amortization of securities premiums/discounts	943	3,689	2,263
Proceeds from sale of loans	602,948	2,190,295	2,460,786
Loans originated for sale	(560,942)	(1,973,672)	(2,446,830)
Net (accretion) amortization of net deferred loan costs/fees and premiums	(399)	(2,530)	370
Depreciation and amortization of premises and equipment	3,924	4,412	4,011
Change in mortgage servicing rights fair value	(5,332)	380	6,732
Mortgage servicing rights capitalized	(4,538)	(13,815)	(14,415)
Accretion of fair value adjustment on loans and deposits, net	(1,204)	(3,455)	(4,175)
Amortization of other intangible assets	892	1,206	1,665
Amortization of subordinated debt issuance costs	126	126	126
Gain on sale and call of securities, net	—	(241)	(2,533)
Net gains on mortgage loan sales, including fair value adjustments	(14,908)	(53,653)	(112,016)
Bank-owned life insurance income	(1,981)	(2,022)	(2,215)
Income on retirement plan annuities	(456)	(427)	(414)
Write-down of asset held for sale	196	—	—
Net loss on disposal of premises and equipment	41	—	101
Net gain on sale and write-down of other real estate owned and repossessed assets	(30)	(243)	(41)
Deferred income tax expense (benefit)	3,162	6,427	(3,614)
ESOP expense	3,278	3,170	2,103
Share-based compensation expense	3,305	3,784	3,679
Increase in operating lease right-of-use assets	(161)	(3,592)	—
Increase in operating lease liabilities	220	4,000	—
Change in other assets	(20,388)	32,974	(33,222)
Change in other liabilities	8,954	(23,777)	31,080
Net cash provided (used) by operating activities	68,899	224,295	(26,952)
Cash flows from investing activities:			
Activity in securities available for sale:			
Maturities, prepayments and calls	43,426	148,702	110,615
Purchases	(16,102)	(316,746)	(191,560)
Sales	—	39,321	67,574
Activity in securities held to maturity:			
Maturities, prepayment and calls	—	—	432
Purchases	(19,949)	—	—
Sales	—	—	4,759
Net (purchase) redemption of FHLB stock	(14,140)	2,807	8,383
Proceeds on asset held for sale	685	—	8,536
Proceeds from sale of portfolio loans transferred to held for sale	—	—	10,000
Loan pool purchase	(58,311)	(26,768)	—
Participation-in loan purchases	(197,000)	(87,837)	(27,133)
Net loan (originations) payments	(688,689)	4,352	(306,421)
Proceeds from sale of other real estate owned and repossessed assets	327	1,576	1,704
Additions to property and equipment	(2,265)	(6,458)	(5,741)
Net cash used by investing activities	(952,018)	(241,051)	(318,852)

(continued)

The accompanying notes are an integral part of these Consolidated Financial Statements.

HarborOne Bancorp, Inc.

Consolidated Statements of Cash Flows

	Year Ended December 31,		
(in thousands)	2022	2021	2020
Cash flows from financing activities:			
Net increase in deposits	506,725	176,035	562,591
Net change in short-term borrowed funds	385,000	(35,000)	(148,000)
Proceeds from other borrowed funds and subordinated debt	—	3,400	40,000
Repayment of other borrowed funds	(40,036)	(61,786)	(97,035)
Net change in mortgagors' escrow accounts	1,078	723	1,683
Proceeds from exercise of stock options	8,363	643	—
Treasury stock purchased	(62,525)	(69,215)	(15,923)
Dividends paid	(12,188)	(9,195)	(3,258)
Net cash provided by financing activities	786,417	5,605	340,058
Net change in cash and cash equivalents	(96,702)	(11,151)	(5,746)
Cash and cash equivalents at beginning of period	194,719	205,870	211,616
Cash and cash equivalents at end of period	$ 98,017	$ 194,719	$ 205,870
Supplemental cash flow information:			
Interest paid on deposits	$ 14,235	$ 8,714	$ 23,253
Interest paid on borrowed funds	6,783	3,951	5,910
Income taxes paid, net	11,674	20,885	18,089
Transfer of loans to other real estate owned and repossessed assets	297	792	1,540
Transfer of securities held to maturity to available for sale, fair value	—	—	22,051
Transfer of asset to assets held for sale	—	881	10,937
Dividends declared	12,966	10,130	4,836
Supplemental disclosure related to adoption of ASU 2016-02, detailed in Note 1:			
ROU asset	$ —	$ 23,189	$ —
Operating lease liabilities	—	24,370	—

The accompanying notes are an integral part of these Consolidated Financial Statements.

1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of Presentation and Consolidation

HarborOne Bancorp, Inc. (the "Company") is the stock holding company of HarborOne Bank (the "Bank"), a state-chartered trust company, which in turn owns a residential mortgage banking company, HarborOne Mortgage, LLC ("HarborOne Mortgage"). HarborOne Mortgage was acquired as Merrimack Mortgage, LLC on July 1, 2015 and effective April 3, 2018 became HarborOne Mortgage. The Consolidated Financial Statements include the accounts of the Company, the Company's subsidiaries, Legion Parkway Company LLC, a security corporation formed on July 13, 2016 and HarborOne Bank; and the Bank's wholly-owned subsidiaries. HarborOne Mortgage, one security corporation subsidiary and one passive investment subsidiary, which were established for the purpose of buying, holding and selling securities on their own behalf. All significant intercompany balances and transactions have been eliminated in consolidation.

Nature of Operations

The Company provides a variety of financial services to individuals and businesses through its 31 full-service bank branches in Massachusetts and Rhode Island, and a commercial lending office in each of Boston, Massachusetts and Providence, Rhode Island. HarborOne Mortgage maintains offices in Maine, Massachusetts, Rhode Island, New Hampshire and New Jersey and originates loans in six additional states.

The Company's primary deposit products are checking, money market, savings and term certificate of deposit accounts while its primary lending products are commercial real estate, commercial, residential mortgages, home equity, and consumer loans. The Company also originates, sells and services residential mortgage loans through HarborOne Mortgage.

Use of Estimates

To prepare financial statements in conformity with accounting principles generally accepted in the United States of America, Management makes estimates and assumptions based on available information. These estimates and assumptions affect the amounts reported in the financial statements and the disclosures provided, however, actual results could differ.

Significant Group Concentration of Credit Risk

The Company has cash and federal fund balances on deposit at correspondent banks that exceed insurable limits. The Company has not experienced any losses on such amounts. Most of the Company's lending activities are with borrowers located within south eastern New England. The ability and willingness of residential and consumer borrowers to honor their repayment commitments is generally dependent on the level of overall economic activity within the borrowers' geographic area and real estate values. Note 4 provides the detail of the Company's loan portfolio and Note 2 provides the detail of the Company's investment portfolio. The Company does not have any significant concentrations to any one industry or customer.

Reclassifications

Certain prior year amounts have been reclassified to conform to the current year financial statement presentation. These changes and reclassifications did not impact previously reported net income or comprehensive income.

Cash Flows

Cash and cash equivalents include cash, interest-bearing deposits with other financial institutions with maturities fewer than 90 days, and federal funds sold. Net cash flows are reported for customer loan and deposit transactions and interest-bearing deposits in other financial institutions.

Debt Securities

Debt securities are classified as held-to-maturity and carried at amortized cost when Management has the positive intent and ability to hold them to maturity. Debt securities are classified as available for sale when they might be sold before maturity. Securities available for sale are carried at fair value, with unrealized holding gains and losses reported in other comprehensive income, net of tax.

Interest income includes amortization of purchase premium or discount. Premiums and discounts on securities are amortized on the level-yield method without anticipating prepayments, except for mortgage-backed securities where prepayments are anticipated. Gains and losses on sales are recorded on the trade date and determined using the specific identification method.

Effective January 1, 2022, the Company adopted the provisions of Topic 326 and modified its accounting for the assessment of available for sale debt securities for impairment as further described below.

The Company has made an accounting policy election to exclude accrued interest from the amortized cost basis of debt securities and reports accrued interest separately in other assets in the Consolidated Balance Sheets. The Company also excludes accrued interest from the estimate of credit losses.

A debt security is placed on non-accrual status at the time any principal or interest payments become more than 90 days delinquent or if full collection of interest or principal becomes uncertain. Accrued interest for a debt security placed on non-accrual is reversed against interest income. There were no debt securities on non-accrual status, and therefore there was no accrued interest related to debt securities reversed against interest income, for the years ended December 31, 2022 and 2021.

The Company measures expected credit losses on held to maturity securities on a collective basis by major security type in accordance with the CECL methodology. As of December 31, 2022, the held to maturity securities were U.S. government-sponsored agency obligations. These securities are guaranteed by the government sponsored agency with a long history of no credit losses. As a result, Management has determined these securities to have a zero loss expectation and therefore does not estimate an allowance for credit losses on these securities.

For available-for-sale debt securities in an unrealized loss position, Management first assesses whether the Company intends to sell, or if it is likely that the Company will be required to sell the security before recovery of its amortized cost basis. If either of the criteria regarding intent or requirement to sell is met, the security's amortized cost basis is written down to fair value through a provision for credit losses charge to earnings. For debt securities available for sale that do not meet either these criteria, Management evaluates whether the decline in fair value has resulted from credit losses or other factors. In making this assessment, Management considers both quantitative and qualitative factors.

A substantial portion of available-for-sale debt securities held by the Company are obligations issued by U.S. government agencies and U.S. government-sponsored enterprises, including mortgage-backed securities. These securities are either explicitly or implicitly guaranteed by the U.S. government, which are highly rated by major credit rating agencies and have a long history of no credit losses. For these securities, Management takes into consideration the long history of no credit losses and other factors to assess the risk of nonpayment even if the U.S. government were to default. As such, the Company has utilized a zero loss estimate due to credit for these securities. For available-for-sale debt securities that are not guaranteed by U.S. government agencies and U.S. government-sponsored enterprises, such as corporate bonds, Management utilizes a third-party credit modeling tool based on observable market data, which assists Management in identifying any potential credit risk associated with its available-for-sale debt securities. In addition, qualitative factors are also considered, including the extent to which fair value is less than amortized cost, changes to the credit rating of the security by a rating agency, and adverse conditions specifically related to the security, among other factors. If a credit loss exists based on the results of this assessment, an ACL (contra asset) is recorded, limited by the amount that the fair value is less than the amortized cost basis. Any impairment that has not been recorded through an ACL is considered market-related and is recognized in other comprehensive income, net of taxes.

Changes in the ACL on available-for-sale debt securities are recorded as provision for (or reversal of) credit losses. Losses are charged against the ACL when Management believes the uncollectability of an available-for-sale debt security is confirmed or when either of the criteria regarding intent or requirement to sell is met.

Prior to January 1, 2022, the accounting policy on the assessment of debt securities was based on other-than-temporary impairment ("OTTI") on at least a quarterly basis, and more frequently when economic or market conditions warrant such an evaluation. For debt securities in an unrealized loss position, Management considered the extent and duration of the unrealized loss, and the financial condition and near-term prospects of the issuer. Management also assessed whether it intended to sell, or it was more likely than not that it would be required to sell, a debt security in an unrealized loss position before recovery of its amortized cost basis. If either of the criteria regarding intent or requirement to sell was met, the entire difference between amortized cost and fair value was recognized as impairment through earnings. For debt securities that did not meet the aforementioned criteria, the amount of impairment was split into two components as follows: (1) OTTI related to credit loss, which was recognized in the income statement and (2) OTTI related to other factors, which was recognized in other comprehensive income. The credit loss was defined as the difference between the present value of the cash flows expected to be collected and the amortized cost basis.

Federal Home Loan Bank Stock

The Company, as a member of the Federal Home Loan Bank ("FHLB") system, is required to maintain an investment in capital stock of the FHLB of Boston. Based on redemption provisions of the FHLB, the stock has no quoted market value and is carried at cost. At its discretion, the FHLB may declare dividends on the stock. The Company reviews FHLB stock for impairment based on the ultimate recoverability of the cost basis. As of December 31, 2022 and 2021, no impairment has been recognized.

Mortgage Loans Held for Sale

Residential mortgage loans originated with the intent to sell are classified as held-for-sale and are carried at fair value. Loan origination costs for loans held for sale that the Company accounts for under the fair value option are recognized in noninterest expense when incurred. Changes in fair value are recognized in mortgage banking income. Gains and losses on residential loan sales are recognized at the time of sale and are included in mortgage banking income. Upfront fees and costs related to mortgage loans held for sale for which the fair value option was elected are recognized in mortgage banking income as received / incurred and are not deferred.

Interest income on mortgage loans held for sale is recorded in interest income.

Loans

Loans held for investment are reported at their outstanding unpaid principal balances adjusted for charge-offs, the allowance for credit losses on loans, and any unamortized deferred origination fees and costs.

Loan origination fees are offset with related direct incremental loan origination costs and the resulting net amount is deferred and amortized to interest income using the level-yield method over the remaining life of the loan without anticipating prepayment.

Accrual of interest on loans is discontinued when collectability of principal or interest is uncertain or when payments of principal or interest have become contractually past due 90 days or more. Past due status is based on contractual terms of the loan. However, a loan may remain on accrual status if both the value of any collateral securing the loan is sufficient to cover principal and accrued interest thereon, and the loan is in the process of collection. In all cases, loans are placed on nonaccrual or charged-off at an earlier date if collection of principal or interest is considered doubtful.

All interest accrued but not received for loans placed on non-accrual is reversed against interest income. Interest received on such loans is accounted for on the cash-basis or cost-recovery method until qualifying for return to accrual. Under the cost-recovery method, interest income is not recognized until the loan balance is reduced to zero.

Under the cash-basis method, interest income is recorded when the payment is received in cash. Loans are returned to accrual status when all the principal and interest amounts contractually due are brought current and future payments are reasonably assured.

The Company's loan portfolio includes residential real estate, commercial real estate, construction, commercial and industrial and consumer segments. Residential real estate loans include classes for one- to four-family and second mortgages and equity lines of credit. Consumer loans include classes for auto and personal loans.

The Company's acquired loans are recorded at fair value with no carryover of the allowance for credit losses. Net discount on performing loans acquired are recognized as interest income over the remaining life of the loan.

Acquired loans determined to have evidence of deterioration in credit quality and when it is probable, at acquisition, that all contractually required payments will not be collected, are deemed to be purchased credit deteriorated ("PCD") loans. For PCD loans, the excess of cash flows expected to be collected over the carrying amount of the loans, referred to as the "accretable yield," is accreted into interest income over the life of the loans using the effective yield method. The Company monitors actual cash flows to determine any deterioration from those forecasted at the acquisition date, which is evaluated and recorded through the allowance for credit losses.

Allowance for Credit Losses on Loans

Effective January 1, 2022, the Company has modified its accounting policy for the ACL on loans as described below.

The Company has made an accounting policy election to exclude accrued interest from the amortized cost basis of loans and reports accrued interest separately in other assets in the Consolidated Balance Sheets. The Company also excludes accrued interest from the estimate of credit losses. Accrued interest receivable on loans totaled $13.8 million and $9.6 million, respectively, as of December 31, 2022 and 2021, respectively.

The ACL on loans is Management's estimate of expected credit losses over the expected life of the loans at the reporting date. The ACL on loans is increased through a provision for credit losses recognized in the Consolidated Statements of Income and by recoveries of amounts previously charged off. The ACL on loans is reduced by charge-offs on loans. Loan charge-offs are recognized when Management believes the collectability of the principal balance outstanding is unlikely. Full or partial charge-offs on collateral-dependent individually analyzed loans are generally recognized when the collateral is deemed to be insufficient to support the carrying value of the loan.

The level of the ACL on loans is based on Management's ongoing review of all relevant information, from internal and external sources, relating to past events, current conditions and reasonable and supportable forecasts. Historical credit loss experience provides the basis for the calculation of probability of default, loss given default, exposure at default and the estimation of expected credit losses. As discussed further below, adjustments to historical information are made for differences in specific risk characteristics, such as differences in underwriting standards, portfolio mix, delinquency level, or term, as well as for changes in environmental conditions, that may not be reflected in historical loss rates.

Management employs a process and methodology to estimate the ACL on loans that evaluates both quantitative and qualitative factors. The methodology for evaluating quantitative factors consists of two basic components. The first component involves pooling loans into portfolio segments for loans that share similar risk characteristics. Pooled loan portfolio segments include commercial real estate, commercial and industrial, commercial construction, residential real estate (including homeowner construction), home equity and consumer loans. The second component involves individually analyzed loans that do not share similar risk characteristics with loans that are pooled into portfolio segments. Individually analyzed loans include non-accrual loans, commercial loans risk-rated 8 or greater, loans classified as a TDR and certain other loans based on the underlying risk characteristics and the discretion of Management to individually analyze such loans.

For loans that are individually analyzed, the ACL is measured using a discounted cash flow ("DCF") methodology based upon the loan's contractual effective interest rate, or at the loan's observable market price, or, if the loan is collateral-dependent, at the fair value of the collateral. Factors Management considers when measuring the extent of expected credit loss include payment status, collateral value, borrower financial condition, guarantor support and the probability of collecting scheduled principal and interest payments when due. For collateral-dependent loans for which repayment is to be provided substantially through the sale of the collateral, Management adjusts the fair value for estimated costs to sell. For collateral-dependent loans for which repayment is to be provided substantially through the operation of the collateral, such as accruing TDRs, estimated costs to sell are not incorporated into the measurement. Management may also adjust appraised values to reflect estimated market value declines or apply other discounts to appraised values for unobservable factors resulting from its knowledge of circumstances associated with the collateral.

For pooled loans, the Company utilizes a DCF methodology to estimate credit losses over the expected life of the loan. The life of the loan excludes expected extensions, renewal and modifications, unless: (1) the extension or renewal options are included in the original or modified contract terms and not unconditionally cancellable by the Company; or (2) Management reasonably expects at the reporting date that a TDR will be executed with an individual borrower. The methodology incorporates the probability of default and loss given default, which are identified by default triggers such as past due by 90 or more days, whether a charge-off has occurred, the loan is non-accrual, the loan has been modified in a TDR or the loan is risk-rated as special mention, substandard, or doubtful. The probability of default for the life of the loan is determined by the use of an econometric factor. Management utilizes the national unemployment rate as an econometric factor with a one-year forecast period and one-year straight-line reversion period to the historical mean of its macroeconomic assumption in order to estimate the probability of default for each loan portfolio segment. Utilizing a third-party regression model, the forecasted national unemployment rate is correlated with the probability of default for each loan portfolio segment. The DCF methodology combines the probability of default, the loss given default, maturity date and prepayment speeds to estimate a reserve for each loan. The sum of all the loan level reserves are aggregated for each portfolio segment and a loss rate factor is derived.

Quantitative loss factors are also supplemented by certain qualitative risk factors reflecting Management's view of how losses may vary from those represented by quantitative loss rates. These qualitative risk factors include: (1) changes in lending policies and procedures, including changes in underwriting standards and collection, charge-off, and recovery practices not considered elsewhere in estimating credit losses; (2) changes in international, national, regional, and local economic and business conditions and developments that affect the collectability of the portfolio, including the condition of various market segments; (3) changes in the nature of the portfolio and in the volume of past due loans; (4) changes in the experience, ability, and depth of lending management and other relevant staff; (5) changes in the quality of the loan review system; (6) changes in the value of underlying collateral for collateral-dependent loans; (7) the existence and effect of any concentrations of credit, and changes in the level of such concentrations; and (8) the effect of other external factors such as legal and regulatory requirements on the level of estimated credit losses in the institution's existing portfolio. Qualitative loss factors are applied to each portfolio segment and determined based on the risk characteristics of each segment.

Because the methodology is based upon historical experience and trends, current economic data, reasonable and supportable forecasts, as well as Management's judgment, factors may arise that result in different estimations. Deteriorating conditions or assumptions could lead to further increases in the ACL on loans. In addition, various regulatory agencies periodically review the ACL on loans. Such agencies may require additions to the allowance based on their judgments about information available to them at the time of their examination. The ACL on loans is determined by an estimate of future credit losses, and ultimate losses may vary from Management's estimate.

Prior to January 1, 2022, the allowance for loan losses was based on an incurred loss methodology and represented Management's estimate of the risk of loss inherent in the loan portfolio as of the balance sheet date. The level of the allowance was based on Management's ongoing review of the growth and composition of the loan portfolio, historical loss experience, estimated loss emergence period (the period from the event that triggers the eventual default until the actual loss was recognized with a charge-off), economic conditions, analysis of asset quality and credit quality levels and trends, the performance of individual loans in relation to contract terms and other pertinent factors.

A methodology was used to systematically measure the amount of estimated loan loss exposure inherent in the loan portfolio for the purposes of establishing a sufficient allowance for loan losses. The methodology included: (1) the identification of loss allocations for individual loans deemed to be impaired and (2) the application of loss allocation factors for non-impaired loans based on historical loss experience and estimated loss emergence period, with adjustments for various exposures that Management believed were not adequately represented by historical loss experience.

Loss allocations for loans deemed to be impaired were measured using a discounted cash flow method based upon the loan's contractual effective interest rate, or at the loan's observable market price, or, if the loan was collateral dependent, at the fair value of the collateral. For loans that were collectively evaluated, loss allocation factors were derived by analyzing historical loss experience by loan segment over an established look-back period deemed to be relevant to the inherent risk of loss in the portfolios. Loans were segmented by loan type, collateral type, delinquency status and loan risk rating, where applicable. These loss allocation factors were adjusted to reflect the loss emergence period. These amounts were supplemented by certain qualitative risk factors reflecting

Management's view of how losses may vary from those represented by historical loss rates. The qualitative risk factors were the same as those considered under the ASC 326 accounting policy described above.

Allowance for Credit Losses on Unfunded Commitments

Effective January 1, 2022, the Company has modified its accounting policy for the ACL on unfunded commitments. The updated policy is detailed below.

The ACL on unfunded commitments is Management's estimate of expected credit losses over the expected contractual term (or life) in which the Company is exposed to credit risk via a contractual obligation to extend credit, unless that obligation is unconditionally cancellable by the Company. For each portfolio, estimated loss rates and funding factors are applied to the corresponding balance of unfunded commitments. For each portfolio, the estimated loss rates applied to unfunded commitments are the same quantitative and qualitative loss rates applied to the corresponding on-balance sheet amounts in determining the ACL on loans. The estimated funding factor applied to unfunded commitments represents the likelihood that the funding will occur and is based upon the Company's average historical utilization rate for each portfolio.

The ACL on unfunded commitments is included in other liabilities in the Consolidated Balance Sheets. The ACL on unfunded commitments is adjusted through a provision for credit losses recognized in the Consolidated Statements of Income.

Loan Commitments and Related Financial Instruments

Financial instruments include off-balance sheet credit instruments, such as commitments to make loans and commercial letters of credit, issued to meet customer financing needs. The face amount for these items represents the exposure to loss, before considering customer collateral or ability to repay. Such financial instruments are recorded when they are funded.

Property and Equipment

Land is carried at cost. Buildings, leasehold improvements, and furniture and equipment are carried at cost, less accumulated depreciation and amortization, computed on the straight-line method over the estimated useful lives of the assets or the terms of the leases, if shorter. Expected terms include lease option periods to the extent that the exercise of such options is reasonably assured. Maintenance and repairs are charged to expense as incurred and improvements are capitalized.

Leases

The Company adopted Accounting Standards Update ("ASU") 2016-02 on January 1, 2021, which requires lessees to recognize most leases on their balance sheet. Lessor accounting is largely unchanged. ASU 2016-02 requires both quantitative and qualitative disclosures regarding key information about lease arrangements from both lessees and lessors. The Company elected the effective date transition method utilizing the adoption date as the first date of application of the revised guidance. As a result, prior period amounts have not been restated. Upon adoption, the Company elected certain transitional practical expedients offered through the guidance, including the "package of practical expedients" whereby it did not reassess (i) whether any expired or existing contracts contain leases, (ii) the lease classification of any expired or existing leases, and (iii) initial direct costs for any existing leases, which resulted in the Company not recognizing a cumulative effect adjustment to retained earnings. Management evaluated the leasing contracts and activities and developed methodologies and processes to estimate and account for the right-of-use ("ROU") assets and lease liabilities for building leases based on the present value of future lease payments. On January 1, 2021, the Company recorded right-of-use ROU assets, included in other assets, and lease liabilities, included in other liabilities, totaling $23.2 million and $24.4 million, respectively. The impact to capital ratios as a result of increased risk-weighted assets was immaterial. The adoption of this guidance did not result in a material change to lessee expense recognition.

The Company is committed to rent premises and equipment used in business operations under non-cancelable operating leases and determines if an arrangement meets the definition of a lease upon inception. Leases that transfer substantially all of the benefits and risks of ownership to the Company are classified as finance leases, while all others are classified as operating leases. At lease commencement, a lease liability and ROU asset are calculated and recognized on both types of leases. The lease liability is equal to the present value of the future minimum lease payments. The ROU asset is equal to the lease liability, plus any initial direct costs and prepaid lease payments, less any lessor incentives received. Operating lease ROU assets are included in other assets and finance lease

ROU assets are included in premises and equipment, net. The Company's leases do not provide an implicit interest rate; therefore, the Company used the appropriate FHLB term rate commensurate with the underlying lease terms to determine the present value of operating lease liabilities. The lease term used in the calculation includes any options to extend that the Company is reasonably certain to exercise, determined on a lease-by-lease basis. Leases with an initial term of 12 months or less are not recorded on the balance sheet; we recognize lease expense for these leases on a straight-line basis over the lease term.

At December 31, 2022, the Company had no finance lease ROU assets or lease liabilities. For operating leases, total lease cost is comprised of lease expense, short-term lease cost, and variable lease cost. Lease expense includes future minimum lease payments, which are recognized on a straight-line basis over the lease term, as well as common area maintenance charges, real estate taxes, insurance and other expenses, where applicable, which are expensed as incurred. Total lease cost for operating leases is recorded in occupancy and equipment noninterest expense. See Note 14, Operating Lease Right-of-Use Assets and Liabilities, for further information.

Retirement Plan Annuities

Retirement plan annuities are reflected on the Consolidated Balance Sheets at the face amount of the policies. Changes in recorded value are reflected in income on retirement plan annuities on the Consolidated Statements of Income.

Bank-owned Life Insurance

Bank-owned life insurance policies are reflected on the Consolidated Balance Sheets at net cash surrender value. Changes in the net cash surrender value of the policies, as well as insurance proceeds received, are reflected in bank-owned life insurance income on the Consolidated Statements of Income and are not subject to income taxes. The Company is the beneficiary on these life insurance policies which are purchased for select employees of the Company.

Employee Stock Ownership Plan ("ESOP")

Compensation expense for the Company's ESOP is recorded at an amount equal to the shares committed to be allocated by the ESOP multiplied by the quarterly average fair market value of the shares during the year. The Company recognizes compensation expense ratably over the year based upon the Company's estimate of the number of shares committed to be allocated by the ESOP. The difference between the average fair market value and the cost of the shares committed to be allocated by the ESOP is recorded as an adjustment to additional paid-in capital. Dividends on allocated ESOP shares reduce retained earnings; dividends on unearned ESOP shares reduce debt and accrued interest.

Mortgage Servicing Rights

When mortgage loans are sold with servicing retained, servicing rights are initially recorded at fair value with the income statement effect recorded in gains on sales of loans. Fair value is based on market prices for comparable mortgage servicing contracts, when available, or alternatively, is based on a valuation model that calculates the present value of estimated future net servicing income.

Under the fair value measurement method, the Company measures servicing rights at fair value at each reporting date and reports changes in fair value of servicing assets in earnings in the period in which the changes occur, and are included with changes in mortgage servicing rights fair value on the income statement. The fair values of servicing rights are subject to significant fluctuations as a result of changes in estimated and actual prepayment speeds and default rates and losses.

Servicing fee income, which is reported on the income statement as Mortgage banking income, Other income, is recorded for fees earned for servicing loans. The fees are based on a contractual percentage of the outstanding principal; or a fixed amount per loan and are recorded as income when earned. Late fees and ancillary fees related to loan servicing are not material.

Derivative Financial Instruments

At the inception of a derivative contract, the Company designates the derivative as one of three types based on the Company's intentions and belief as to the likely effectiveness as a hedge. These three types are (1) a hedge of the fair value of a recognized asset or liability or of an unrecognized firm commitment ("fair value hedge"), (2) a hedge of a forecasted transaction or the variability of cash flows to be received or paid related to a recognized asset or liability ("cashflow hedge"), of (3) an instrument with no hedging designation ("stand-alone derivative"). For a fair value hedge, the gain or loss on the derivative, as well as the offsetting loss or gain on the hedged item attributable to the hedged risk, are recognized in current earnings as fair values change. For a cashflow hedge, the gain or loss on the derivative is reported in other comprehensive income and reclassified into earnings in the same periods during which the hedged transaction affects earnings. Changes in the fair value of derivatives that do not qualify for hedge accounting are reported currently in earnings, as non-interest income.

Net cash settlements on derivatives that qualify for hedge accounting are recorded in interest income or interest expense, based on the item being hedged. Net cash settlements on derivatives that do not qualify for hedge accounting are reported in non-interest income. Cash flows on hedges are classified in the cash flow statement the same as the cash flows of the items being hedged.

The Company formally documents all relationships between derivatives and hedged items, as well as the risk-management objective and strategy for undertaking various hedge transactions. This documentation includes linking fair value or cashflow hedges to specific assets and liabilities on the balance sheet or to specific firm commitments or forecasted transactions. The Company also formally assesses, both at the hedge's inception and on an ongoing basis, whether the derivative instruments that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of the hedged items. The Company discontinues hedge accounting prospectively when it is determined that (1) the derivative is no longer effective in offsetting changes in the fair value or cash flows of the hedged item; (2) the derivative expires, is sold, or terminated; (3) the derivative instrument is de-designated as a hedge because the forecasted transaction is no longer probable of occurring; (4) a hedged firm commitment no longer meets the definition of a firm commitment; or (5) Management otherwise determines that designation of the derivative as a hedging instrument is no longer appropriate.

When hedge accounting is discontinued, subsequent changes in fair value of the derivative are recorded as noninterest income. When a fair value hedge is discontinued, the hedged asset or liability is no longer adjusted for changes in fair value and the existing basis adjustment is amortized or accreted over the remaining life of the asset or liability. When a cashflow hedge is discontinued but the hedged cash flows or forecasted transaction is still expected to occur, changes in value that were accumulated in other comprehensive income are amortized or accreted into earnings over the same periods which the hedged transactions will affect earnings.

The Company accounts for commitments to fund mortgage loans (interest rate locks) to be sold into the secondary market and forward commitments for the future delivery of these mortgage loans as free standing derivatives. The fair value of the interest rate lock is recorded at the time the commitment to fund the mortgage loan is executed and is adjusted for the expected exercise of the commitment before the loan is funded. In order to hedge the change in interest rates resulting from its commitments to fund the loans, the Company enters into forward commitments for the future delivery of mortgage loans when interest rate locks are entered into. Fair values of these mortgage derivatives are estimated based on changes in mortgage interest rates from the date the interest on the loan is locked. Changes in fair value are recorded as gain on sale of mortgage loans.

The Company also enters into interest rate swap contracts to meet the financing needs of the Company's commercial customers. Offsetting swap agreements are simultaneously transacted to effectively eliminate the Company's market and interest rate risk associated with the swaps. Interest rate swaps are recognized on the Consolidated Balance Sheets in other assets and other liabilities with changes in their fair values recorded in other income.

Transfers of Financial Assets

Transfers of an entire financial asset, a group of entire financial assets, or a participating interest in an entire financial asset 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 to pledge or exchange the transferred assets, and (3) the Company does not maintain effective control over the transferred assets.

During the normal course of business, the Company may transfer a portion of a financial asset, for example, a participation loan or the government guaranteed portion of a loan. In order to be eligible for sale treatment, the transfer of the portion of the loan must meet the criteria of a participating interest. If it does not meet the criteria of a participating interest, the transfer must be accounted for as a secured borrowing. In order to meet the criteria for a participating interest, all cash flows from the loan must be divided proportionately, the rights of each loan holder must have the same priority, the loan holders must have no recourse to the transferor other than standard representations and warranties and no loan holder has the right to pledge or exchange the entire loan.

Other Real Estate Owned and Repossessed Assets

Assets acquired through, or in lieu of, loan foreclosure are held for sale and are initially recorded at fair value less estimated costs to sell when legal title is obtained, establishing a new cost basis. Subsequently, valuations are periodically updated by Management and the assets are carried at the lower of carrying amount or fair value less estimated costs to sell. The excess (deficiency) of any consideration received as compared to the carrying value of other real estate owned is recorded as a gain (loss) on sale of other real estate owned. Revenues and expenses from operations and changes in the valuation allowance and any direct write-downs are included in foreclosed and repossessed assets expense. Repossessed assets includes automobiles to be sold which are recorded at estimated fair value, less costs to sell, with the initial charge to the allowance for credit losses and the subsequent gain or loss on sale recorded to foreclosed and repossessed assets expense.

Goodwill and Identifiable Intangible Assets

The assets (including identifiable intangible assets) and liabilities acquired in a business combination are recorded at fair value at the date of acquisition. Goodwill is recognized for the excess of the acquisition cost over the fair values of the net assets acquired and is not subsequently amortized. Identifiable intangible assets include core deposit premium and non-compete contracts and are being amortized over their estimated lives. Management assesses the recoverability of goodwill at least on an annual basis and all intangible assets whenever events or changes in circumstances indicate that their carrying value may not be recoverable. The impairment test uses a combined qualitative and quantitative approach. The initial qualitative approach assesses whether the existence of events or circumstances led to a determination that it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after this assessment, the Company determines that it is more likely than not that the fair value is less than the carrying value, a quantitative impairment test is performed. The quantitative impairment test compares book value to the fair value of the reporting unit. If the carrying amount exceeds fair value, an impairment charge is recorded through earnings. Management has identified two reporting units for purposes of testing goodwill for impairment. The Company's reporting units are the same as the segments used for segment reporting - the Bank, including one security corporation and one passive investment company, and HarborOne Mortgage. No impairment has been recognized as of December 31, 2022.

Income Taxes

Deferred tax assets and liabilities are determined using the asset and liability (or balance sheet) method. Under this method, the net deferred tax asset or liability is determined based on the tax effects of the temporary differences between the book and tax bases of the various balance sheet assets and liabilities and gives current recognition to changes in tax rates and laws in the period on enactment. A valuation allowance is established against deferred tax assets when, based upon the available evidence including historical and projected taxable income, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company records uncertain tax positions on the basis of a two-step process in which (1) we determine whether it is more likely than not that the tax positions will be sustained on the basis of the technical merits of the position and (2) for those tax positions that meet the more-likely-than-not recognition threshold, we recognize the largest amount of tax benefit that is more than 50 percent likely to be realized upon ultimate settlement with the related tax authority. The determination of whether or not a tax position has met the more likely than not recognition threshold considers the facts, circumstances and information available at the reporting date and is subject to Management's judgment. The Company records interest and penalties as part of income tax expense.

Fair Value of Financial Instruments

The fair value of financial instruments is estimated using relevant market information and other assumptions, as more fully disclosed in a separate note. Fair value estimates involve uncertainties and matters of significant judgement regarding interest rates, credit risk, prepayments, and other factors, especially in the absence of broad markets for particular items. Changes in assumptions or in market conditions could significantly affect these estimates.

Share-based Compensation Plans

The Company's share-based compensation plans provide for awards of stock options, restricted stock and other stock-based compensation to directors, officers and employees. The cost of employee services received in exchange for awards of equity instruments is based on the grant-date fair value of those awards. Compensation cost is recognized over the requisite service period as a component of compensation expense. The Company uses the Black-Scholes option-pricing model to determine the fair value of stock options granted, while the market price of the Company's common stock at the date of grant is used for restricted stock awards and performance stock units. Nonvested performance share unit compensation expense is based on the most recent performance assumption available and is adjusted as assumptions change. Dividends declared on restricted stock are accrued at each dividend declaration date and paid upon the issuance of the shares after the award vests. Dividends on performance share units are accrued at each dividend declaration date based on the most recent performance assumptions available and paid upon the issuance of the shares after the award vest.

The Company has elected to recognize forfeitures of awards as they occur (*e.g.*, when an award does not vest because the employee leaves the Company or does not meet specific performance measures).

Comprehensive Income (Loss)

Comprehensive income (loss) consists of net income and other comprehensive income (loss). Other comprehensive income includes unrealized gains and losses on debt securities available for sale and cashflow hedges, net of taxes, which are also recognized as a separate component of equity.

Revenue Recognition

ASC 606, Revenue from Contracts with Customers, provides a revenue recognition framework for contracts with customers unless those contracts are within the scope of other accounting standards.

Revenue from deposit account-related fees, including general service fees charged for deposit account maintenance and activity and transaction-based fees charged for certain services, such as debit card, wire transfer or overdraft activities, is recognized when the performance obligation is completed, which is generally after a transaction is completed or monthly for account maintenance services.

Earnings Per Share

Basic earnings per common share is net income divided by the weighted-average number of common shares outstanding during the period. Unallocated ESOP shares are not deemed outstanding for earnings per share calculations. Restricted stock awards are included in weighted average common shares outstanding as they are earned. Outstanding unvested share-based payment awards that contain rights to nonforfeitable dividends are considered participating securities for this calculation. Diluted earnings per common share includes the dilutive effect of additional potential common shares issuable. Potential common shares that may be issued by the Company relate to outstanding stock options awards and restricted stock awards and are determined using the treasury stock method.

Loss Contingencies

Loss contingencies, including claims and legal actions arising in the ordinary course of business, are recorded as liabilities when the likelihood of loss is probable and an amount or range of loss can be reasonably estimated.

Recent Accounting Pronouncements

In March 2022, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2022-02, "Financial Instruments – Credit Losses (Topic 326), Troubled Debt Restructurings and Vintage Disclosures" ("ASU 2022-02"). ASU 2022-02 eliminates the accounting guidance for troubled debt restructurings ("TDRs") in Accounting Standards Codification ("ASC") 310-40, "Receivables – Troubled Debt Restructurings by Creditors" for entities that have adopted the current expected credit loss ("CECL") model introduced by ASU 2016-13, "Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" ("ASU 2016-13"). ASU 2022-02 also requires that public business entities disclose current-period gross charge-offs by year of origination for financing receivables and net investments in leases within the scope of Subtopic 326-20, "Financial Instruments — Credit Losses — Measured at Amortized Cost." ASU 2022-02 is effective for the Company for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years, with early adoption permitted. The Company does not expect the adoption of ASU 2022-02 to have a material impact on its consolidated financial statements and related disclosures.

2. DEBT SECURITIES

Adoption of Topic 326

Effective January 1, 2022, the Company adopted the provisions of Topic 326 using the modified retrospective method. Therefore, prior period comparative information has not been adjusted and continues to be reported under GAAP in effect prior to the adoption of Topic 326. There was no ACL on available-for-sale debt securities recognized upon the adoption of Topic 326.

Debt Securities

The amortized cost and fair value of securities with gross unrealized gains and losses is as follows:

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Allowance for Credit Losses	Fair Value
			(in thousands)		
December 31, 2022:					
Securities available for sale					
U.S. government and government-sponsored enterprise obligations	$ 47,143	$ —	$ 8,649	$ —	$ 38,494
U.S. government agency and government-sponsored residential mortgage-backed securities	315,964	—	59,149	—	256,815
U.S. government-sponsored collateralized mortgage obligations	2,612	—	113	—	2,499
SBA asset-backed securities	2,685	—	190	—	2,495
Corporate bonds	1,000	—	154	—	846
Total securities available for sale	$ 369,404	$ —	$ 68,255	$ —	$ 301,149
Securities held to maturity					
U.S. government and government-sponsored enterprise obligations	$ 15,000	$ —	$ 597	$ —	$ 14,403
SBA asset-backed securities	4,949	—	78	—	4,871
Total securities held to maturity	$ 19,949	$ —	$ 675	$ —	$ 19,274

	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
	(in thousands)			
December 31, 2021:				
Securities available for sale				
U.S. government and government-sponsored enterprise obligations	$ 42,148	$ —	$ 883	$ 41,265
U.S. government agency and government-sponsored residential mortgage-backed securities	347,716	914	3,870	344,760
U.S. government-sponsored collateralized mortgage obligations	3,927	100	—	4,027
SBA asset-backed securities	3,880	104	—	3,984
Total securities available for sale	$ 397,671	$ 1,118	$ 4,753	$ 394,036

Seventeen mortgage-backed securities with a combined fair value of $13.9 million are pledged as collateral for interest rate swap agreements as of December 31, 2021 (see Note 13). There were no securities pledged as collateral for interest rate swap agreements as of December 31, 2022 (see Note 13).

The amortized cost and fair value of debt securities by contractual maturity at December 31, 2022 is as follows:

	Available for Sale		Held to Maturity	
	Amortized Cost	Fair Value	Amortized Cost	Fair Value
	(in thousands)			
After 1 year through 5 years	$ 5,000	$ 4,750	$ 15,000	$ 14,403
After 5 years through 10 years	43,143	34,590	—	—
Over 10 years	—	—	—	—
	48,143	39,340	15,000	14,403
U.S. government agency and government-sponsored residential mortgage-backed securities	315,964	256,815	—	—
U.S. government-sponsored collateralized mortgage obligations	2,612	2,499	—	—
SBA asset-backed securities	2,685	2,495	4,949	4,871
Total	$ 369,404	$ 301,149	$ 19,949	$ 19,274

U.S. government-sponsored residential mortgage-backed securities, collateralized mortgage obligations and securities whose underlying assets are loans from the SBA have stated maturities of two to 29 years; however, it is expected that such securities will have shorter actual lives due to prepayments. U.S. government and GSE obligations and corporate bonds are callable at the discretion of the issuer. The U.S. government and GSE obligations and corporate bonds with a total fair value of $53.7 million have a final maturity of five to ten years and a call feature of one month to five years. At December 31, 2022 and 2021, there were no holdings of securities of any one issuer, other than the U.S. government and its agencies, in an amount greater than 10% of shareholder equity.

The following table shows proceeds and gross realized gains and losses related to the sales and calls of securities for the periods indicated:

	Year Ended December 31, 2022	2021 (in thousands)	2020
Sales			
Proceeds	$ —	$ 39,321	$ 72,333
Gross gains	—	241	2,521
Gross losses	—	—	—
Calls			
Proceeds	$ —	$ 5,000	$ 13,635
Gross gains	—	—	12
Gross losses	—	—	—

Information pertaining to securities with gross unrealized losses at December 31, 2022 and December 31, 2021 aggregated by investment category and length of time that individual securities have been in a continuous loss position follows:

	Less Than Twelve Months		Twelve Months and Over	
	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses	Fair Value
	(in thousands)			
December 31, 2022:				
Securities available for sale				
U.S. government and government-sponsored enterprise obligations	$ 249	$ 4,751	$ 8,400	$ 33,743
U.S. government agency and government-sponsored residential mortgage-backed securities	3,620	35,214	55,529	221,566
U.S. government-sponsored collateralized mortgage obligations	113	2,499	—	—
SBA asset-backed securities	190	2,495	—	—
Corporate bonds	154	846	—	—
	$ 4,326	$ 45,805	$ 63,929	$ 255,309
Securities held to maturity				
U.S. government and government-sponsored enterprise obligations	$ 597	$ 14,403	—	—
SBA asset-backed securities	78	4,871	—	—
	$ 675	$ 19,274	$ —	$ —
December 31, 2021:				
Securities available for sale				
U.S. government and government-sponsored enterprise obligations	$ 883	$ 41,265	$ —	$ —
U.S. government agency and government-sponsored residential mortgage-backed securities	2,835	262,889	1,035	35,552
	$ 3,718	$ 304,154	$ 1,035	$ 35,552

Management assesses the decline in fair value of investment securities on a regular basis. Unrealized losses on debt securities may occur from current market conditions, increases in interest rates since the time of purchase, a structural change in an investment, volatility of earnings of a specific issuer, or deterioration in credit quality of the issuer. Management evaluates both qualitative and quantitative factors to assess whether an impairment exists.

As of December 31, 2022, the Company's security portfolio consisted of 131 debt securities, 130 of which were in an unrealized loss position. The unrealized losses are primarily related to the Company's debt securities that were issued by U.S. government-sponsored entities and agencies. The Company does not believe that the debt securities that were in an unrealized loss position as of December 31, 2022 represent a credit loss impairment. As of December 31, 2022 and December 31, 2021, the gross unrealized loss positions were primarily related to mortgage-backed securities and other obligations issued by U.S. government agencies or U.S.

government-sponsored enterprises. These securities carry the explicit and/or implicit guarantee of the U.S. government and have a long history of zero credit loss. Total gross unrealized losses were primarily attributable to changes in interest rates relative to when the investment securities were purchased, and not due to the credit quality of the investment securities.

Management reviewed the collectability of the corporate bonds taking into consideration such factors as the financial condition of the issuers, reported regulatory capital ratios of the issuers, credit ratings, including ratings in effect as of the reporting period date as well as credit rating changes between the reporting period date and the filing date of this report, and other information. Management believes the unrealized losses on the corporate bonds are primarily attributable to changes in the investment spreads and interest rates and not changes in the credit quality of the issuers of the corporate bonds.

Management expects to recover the entire amortized cost basis of the debt securities with an unrealized loss. Furthermore, the Company does not intend to sell these securities, and it is unlikely that the Company will be required to sell these securities, before recovery of their cost basis, which may be at maturity. Therefore, no allowance for credit losses was recorded at December 31, 2022.

For the accounting policy on the assessment of debt securities available for sale that was in effect prior to the adoption of Topic 326, see Note 1 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

3. LOANS HELD FOR SALE

The following table provides the fair value and contractual principal balance outstanding of loans held for sale accounted for under the fair value option:

	December 31, 2022	December 31, 2021
	(in thousands)	
Loans held for sale, fair value	$ 18,544	$ 45,642
Loans held for sale, contractual principal outstanding	18,208	44,245
Fair value less unpaid principal balance	$ 336	$ 1,397

The Company has elected the fair value option for mortgage loans held for sale to better match changes in the fair value of the loans with changes in the fair value of the forward sale commitment contracts used to economically hedge them. Changes in fair value of mortgage loans held for sale accounted for under the fair value option election amounted to a decrease of $1.1 million in the year ended December 31, 2022 to $336,000, compared to a decrease of $8.2 million in the year ended December 31, 2021. These amounts are offset in earnings by the changes in fair value of forward sale commitments. The changes in fair value are reported as a component of gain on sale of mortgage loans in the Consolidated Statements of Income.

At December 31, 2022 and 2021, there were no loans held for sale that were greater than 90 days past due.

4. LOANS AND ALLOWANCE FOR CREDIT LOSSES

A summary of the balances of loans follows:

	December 31, 2022	December 31, 2021
	(in thousands)	
Residential real estate:		
One- to four-family	$ 1,432,263	$ 1,047,819
Second mortgages and equity lines of credit	166,219	136,853
Residential real estate construction	35,837	33,308
Total residential real estate loans	1,634,319	1,217,980
Commercial:		
Commercial real estate	2,250,344	1,699,877
Commercial construction	199,311	136,563
Commercial and industrial	424,275	421,608
Total commercial loans	2,873,930	2,258,048
Consumer loans:		
Auto	33,625	124,354
Personal	7,796	7,351
Total consumer loans	41,421	131,705
Total loans	4,549,670	3,607,733
Allowance for credit losses on loans	(45,236)	(45,377)
Loans, net	$ 4,504,434	$ 3,562,356

The net unamortized deferred loan origination fees and costs included in total loans and leases were $7.4 million and $5.4 million as of December 31, 2022 and 2021, respectively.

As of December 31, 2022 and December 31, 2021, the commercial and industrial loans include $2.1 million and $27.0 million, respectively, of Paycheck Protection Program (“PPP”) loans and $65,000 and $949,000, respectively, of deferred fees on the PPP loans. PPP loans are fully guaranteed by the U.S. government.

The Company has transferred a portion of its originated commercial loans to participating lenders. The amounts transferred have been accounted for as sales and are therefore not included in the Company’s accompanying Consolidated Balance Sheets. The Company and participating lenders share ratably in cash flows and any gains or losses that may result from a borrower’s lack of compliance with contractual terms of the loan. The Company continues to service the loans on behalf of the participating lenders and, as such, collects cash payments from the borrowers, remits payments to participating lenders and disburses required escrow funds to relevant parties. At December 31, 2022 and 2021, the Company was servicing loans for participants in the aggregate amount of $366.4 million and $288.9 million, respectively.

Adoption of Topic 326

Effective January 1, 2022, the Company adopted the provisions of Topic 326 using the modified retrospective method. Therefore, prior period comparative information has not been adjusted and continues to be reported under GAAP in effect prior to the adoption of Topic 326. For the accounting policy on the allowance for loan losses that was in effect prior to the adoption of Topic 326, see Note 1 to our Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

As a result of adopting Topic 326, the Company decreased the ACL on loans by $1.3 million on January 1, 2022. The following table presents the activity in the ACL on loans for the year ended December 31, 2022:

	One- to Four-Family	Second Mortgages and Equity Lines of Credit	Residential Real Estate Construction	Commercial Real Estate	Commercial Construction	Commercial and Industrial	Consumer	Unallocated	Total
	(in thousands)								
Balance at December 31, 2021	$ 3,631	$ 420	$ 69	$ 33,242	$ 2,010	$ 4,638	$ 367	$ 1,000	$ 45,377
Adoption of Topic 326	5,198	391	185	(10,194)	1,698	2,288	123	(1,000)	(1,311)
Charge-offs	—	—	—	(4,964)	—	(253)	(76)	—	(5,293)
Recoveries	2	117	—	38	—	1,563	79	—	1,799
Provision	2,701	(4)	26	2,235	937	(1,000)	(231)	—	4,664
Balance at December 31, 2022	$ 11,532	$ 924	$ 280	$ 20,357	$ 4,645	$ 7,236	$ 262	$ —	$ 45,236

The following is the activity in the allowance for loan losses for the years ended December 31, 2021 and 2020:

	One- to Four-Family	Second Mortgages and Equity Lines of Credit	Residential Real Estate Construction	Commercial Real Estate	Commercial Construction	Commercial and Industrial	Consumer	Unallocated	Total
	(in thousands)								
Balance at December 31, 2019	$ 2,602	$ 553	$ 23	$ 12,875	$ 2,526	$ 2,977	$ 1,010	$ 1,494	$ 24,060
Provision for loan losses	3,399	388	174	23,129	366	3,552	1,831	1,976	34,815
Charge-offs	(51)	(9)	—	(1,240)	(937)	(1,471)	(599)	—	(4,307)
Recoveries	218	122	—	1	—	253	233	—	827
Balance at December 31, 2020	$ 6,168	$ 1,054	$ 197	$ 34,765	$ 1,955	$ 5,311	$ 2,475	$ 3,470	$ 55,395
Provision for loan losses	(2,755)	(794)	(128)	(1,123)	55	2,055	(2,098)	(2,470)	(7,258)
Charge-offs	—	—	—	(405)	—	(2,850)	(177)	—	(3,432)
Recoveries	218	160	—	5	—	122	167	—	672
Balance at December 31, 2021	$ 3,631	$ 420	$ 69	$ 33,242	$ 2,010	$ 4,638	$ 367	$ 1,000	$ 45,377

Effective January 1, 2022, individually analyzed loans include non-accrual loans, loans classified as TDRs, and certain other loans based on the underlying risk characteristics and the discretion of Management to individually analyze such loans. As of December 31, 2022, the carrying value of individually analyzed loans amounted to $23.8 million, with a related allowance of $203,000, and $15.9 million were considered collateral-dependent.

For collateral-dependent loans where Management has determined that foreclosure of the collateral is probable, or where the borrower is experiencing financial difficulty and repayment of the loan is to be provided substantially through the operation or sale of the collateral, the ACL is measured based on the difference between the fair value of the collateral and the amortized cost basis of the loan as of the measurement date.

The following table presents the carrying value of collateral-dependent individually analyzed loans as of December 31, 2022:

	Carrying Value	Related Allowance
	(in thousands)	
Commercial:		
Commercial real estate	$ 2,039	$ —
Commercial and industrial	3,329	7
Commercial construction	—	—
Total Commercial	5,368	7
Residential real estate	10,494	1
Total	$ 15,862	$ 8

Prior to January 1, 2022, a loan was considered impaired when, based on current information and events, it was probable that Company would not be able to collect the scheduled payments of principal or interest when due according to the contractual terms of the loan agreement. Impaired loans included non-accrual loans and loans restructured in a TDR. The Company identified loss allocations for impaired loans on an individual-loan basis. The following is a summary of impaired loans at December 31, 2021:

	Residential Real Estate	Commercial Real Estate	Commercial Construction	Commercial and Industrial	Consumer	Unallocated	Total
				(in thousands)			
December 31, 2021:							
Loans:							
Impaired loans	$ 23,110	$ 20,203	$ —	$ 4,182	$ —		$ 47,495
Non-impaired loans	1,194,870	1,679,674	136,563	417,426	131,705		3,560,238
Total loans	$ 1,217,980	$ 1,699,877	$ 136,563	$ 421,608	$ 131,705		$ 3,607,733
Allowance for loan losses:							
Impaired loans	$ 650	$ 7,275	$ —	$ 21	$ —	$ —	$ 7,946
Non-impaired loans	3,470	25,967	2,010	4,617	367	1,000	37,431
Total allowance for loan losses	$ 4,120	$ 33,242	$ 2,010	$ 4,638	$ 367	$ 1,000	$ 45,377

The following information pertains to impaired loans:

	December 31, 2021		
	Recorded Investment	Unpaid Principal Balance	Related Allowance
		(in thousands)	
Impaired loans without a specific reserve:			
Residential real estate	$ 14,115	$ 15,335	$ —
Commercial real estate	2,641	2,692	—
Commercial construction	—	—	—
Commercial and industrial	1,389	3,396	—
Total	18,145	21,423	—
Impaired loans with a specific reserve:			
Residential real estate	8,995	9,791	650
Commercial real estate	17,562	24,847	7,275
Commercial construction	—	—	—
Commercial and industrial	2,793	3,596	21
Total	29,350	38,234	7,946
Total impaired loans	$ 47,495	$ 59,657	$ 7,946

	Year Ended December 31,					
	2021			2020		
	Average Recorded Investment	Interest Income Recognized	Interest Income Recognized on Cash Basis	Average Recorded Investment	Interest Income Recognized	Interest Income Recognized on Cash Basis
	(in thousands)					
Residential real estate	$ 23,800	$ 795	$ 732	$ 26,040	$ 1,115	$ 1,054
Commercial real estate	15,156	6	6	5,064	2	2
Commercial construction	—	—	—	8,831	—	—
Commercial and industrial	7,078	5	5	8,162	80	80
Total	$ 46,034	$ 806	$ 743	$ 48,097	$ 1,197	$ 1,136

Interest income recognized and interest income recognized on a cash basis in the table above represent income for the years ended December 31, 2021 and 2020, not for the time period designated as impaired. No additional funds are committed to be advanced in connection with impaired loans.

The following is a summary of past due and non-accrual loans at December 31, 2022 and 2021:

	30-59 Days Past Due	60-89 Days Past Due	90 Days or More Past Due	Total Past Due	Loans on Non-accrual
	(in thousands)				
December 31, 2022					
Residential real estate:					
One- to four-family	$ 3,711	$ 524	$ 6,526	$ 10,761	$ 8,927
Second mortgages and equity lines of credit	407	5	189	601	421
Commercial real estate	—	—	120	120	2,039
Commercial construction	—	—	—	—	—
Commercial and industrial	26	492	2,901	3,419	3,329
Consumer:					
Auto	348	101	51	500	64
Personal	18	—	6	24	6
Total	$ 4,510	$ 1,122	$ 9,793	$ 15,425	$ 14,786
December 31, 2021					
Residential real estate:					
One- to four-family	$ 5,578	$ 2,901	$ 3,777	$ 12,256	$ 11,210
Second mortgages and equity lines of credit	202	—	336	538	600
Commercial real estate	149	—	11,334	11,483	20,053
Commercial construction	—	—	—	—	—
Commercial and industrial	616	1	3,277	3,894	4,114
Consumer:					
Auto	747	162	140	1,049	144
Personal	67	—	12	79	12
Total	$ 7,359	$ 3,064	$ 18,876	$ 29,299	$ 36,133

At December 31, 2022 and 2021, there were no loans past due 90 days or more and still accruing.

Loan modifications and payment deferrals as a result of the COVID-19 pandemic that meet the criteria established under Section 4013 of the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act") or under applicable interagency guidance of the federal banking regulators are excluded from evaluation of TDR classification and will continue to be reported as current during the payment deferral period. The Company's policy is to continue to accrue interest during the deferral period. Loans that do not meet the CARES Act or regulatory guidance criteria are evaluated for TDR and non-accrual treatment under the Company's existing policies and procedures.

There was one TDR loan modification during the year ended December 31, 2022 and no material modifications for the year ended December 31, 2021. The TDR loan modification in 2022 provided a deferral of principal.

The recorded investment of TDRs was $11.4 million and $11.0 million at December 31, 2022 and 2021, respectively. Commercial TDRs totaled $2.2 million and $408,000 million at December 31, 2022 and 2021, respectively. The remainder of the TDRs outstanding at the end of these periods were residential loans. Non-accrual TDRs totaled $2.6 million and $1.0 million at December 31, 2022 and 2021, respectively. Of these loans, $2.1 million and $190,000 were non-accrual commercial TDRs at December 31, 2022 and 2021, respectively.

All TDR loans are considered impaired and Management performs a discounted cash flow calculation to determine the amount of impairment reserve required on each loan. TDR loans which subsequently default are reviewed to determine if the loan should be deemed collateral-dependent. In either case, any reserve required is recorded as part of the allowance for credit losses.

For the years ended December 31, 2022, 2021 and 2020, there were no significant TDRs that defaulted in the first twelve months of restructure. A default is defined as two or more payments in arrears.

As noted above, loan modifications and payment deferrals as a result of the COVID-19 pandemic that meet the criteria established under Section 4013 of the CARES Act or under applicable interagency guidance of the federal banking regulators are excluded from evaluation of TDR classification and will continue to be reported as current during the payment deferral period. The Company's policy is to continue to accrue interest during the deferral period. Loans not meeting the CARES Act or regulatory guidance are evaluated for TDR and non-accrual treatment under the Company's existing policies and procedures. There were no loan modifications made pursuant to the CARES Act that were in payment deferral at December 31, 2022 or 2021.

Credit Quality Information

Commercial

The Company uses a ten-grade internal loan rating system for commercial real estate, commercial construction and commercial loans, as follows:

Loans rated 1 – 6 are considered "pass" -rated loans with low to average risk.

Loans rated 7 are considered "special mention." These loans are starting to show signs of potential weakness and are being closely monitored by Management.

Loans rated 8 are considered "substandard." Generally, a loan is considered substandard if it is inadequately protected by the current net worth and paying capacity of the obligors and/or the collateral pledged. There is a distinct possibility that the Company will sustain some loss if the weakness is not corrected.

Loans rated 9 are considered "doubtful." Loans classified as doubtful have all the weaknesses inherent in those classified substandard with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently existing facts, highly questionable and improbable.

Loans rated 10 are considered "uncollectible" (loss), and of such little value that their continuance as loans is not warranted.

Loans not rated consist primarily of certain smaller balance commercial real estate and commercial loans that are managed by exception.

On an annual basis, or more often if needed, the Company formally reviews on a risk adjusted basis, the ratings on all commercial real estate, construction and commercial loans. Semi-annually, the Company engages an independent third party to review a significant portion of loans within these segments. Management uses the results of these reviews as part of its annual review process.

Residential and Consumer

On a monthly basis, the Company reviews the residential construction, residential real estate and consumer installment portfolios for credit quality primarily through the use of delinquency reports.

The following table summarizes the Company's loan portfolio by credit quality indicator and loan portfolio segment as of December 31, 2022:

	Term Loans at Amortized Cost by Origination Year						Revolving Loans Amortized Cost	Revolving Loans Converted to Term Loans	Total
	2022	2021	2020	2019	2018	Prior			
					(in thousands)				
As of December 31, 2022									
Commercial real estate									
Pass	$ 817,320	$ 441,277	$ 241,700	$ 254,221	$ 121,351	$ 340,634	$ —	$ —	$ 2,216,503
Special mention	—	—	—	9,328	22,474	—	—	—	31,802
Substandard	—	—	—	—	—	2,039	—	—	2,039
Doubtful	—	—	—	—	—	—	—	—	—
Total commercial real estate	817,320	441,277	241,700	263,549	143,825	342,673	—	—	2,250,344
Commercial and industrial									
Pass	53,078	95,600	82,170	26,568	37,358	50,500	76,647	—	421,921
Special mention	—	—	—	—	49	92	492	—	633
Substandard	—	4	3	—	1	323	—	—	331
Doubtful	—	—	—	—	—	1,340	50	—	1,390
Total commercial and industrial	53,078	95,604	82,173	26,568	37,408	52,255	77,189	—	424,275
Commercial construction									
Pass	88,173	87,569	11,769	9,174	318	1,487	821	—	199,311
Special mention	—	—	—	—	—	—	—	—	—
Substandard	—	—	—	—	—	—	—	—	—
Doubtful	—	—	—	—	—	—	—	—	—
Total commercial construction	88,173	87,569	11,769	9,174	318	1,487	821	—	199,311
Residential real estate									
Accrual	443,034	507,679	211,429	42,314	25,232	239,677	154,038	1,568	1,624,971
Non-accrual	—	203	140	201	1,258	7,411	96	39	9,348
Total residential real estate	443,034	507,882	211,569	42,515	26,490	247,088	154,134	1,607	1,634,319
Consumer									
Accrual	9,948	3,588	1,971	16,955	6,122	1,733	1,034	—	41,351
Non-accrual	1	—	—	28	20	17	4	—	70
Total Consumer	9,949	3,588	1,971	16,983	6,142	1,750	1,038	—	41,421
Total Loans	$ 1,411,554	$ 1,135,920	$ 549,182	$ 358,789	$ 214,183	$ 645,253	$ 233,182	$ 1,607	$ 4,549,670

The following table presents the Company's loans by risk rating at December 31, 2021:

	December 31, 2021		
	Commercial Real Estate	Commercial Construction	Commercial and Industrial
		(in thousands)	
Loans rated 1 - 6	$ 1,645,871	$ 136,563	$ 417,408
Loans rated 7	33,953	—	85
Loans rated 8	20,053	—	694
Loans rated 9	—	—	3,421
Loans rated 10	—	—	—
	$ 1,699,877	$ 136,563	$ 421,608

The Company adopted CECL using the prospective transition approach for financial assets purchased with credit deterioration ("PCD") that were previously classified as PCI loans and accounted for under ASC 310-30 Loans and Debt Securities Acquired with Deteriorated Credit Quality ("ASC 310-30"). In accordance with the standard, the Company did not reassess whether previously recognized PCI loans accounted for under prior accounting guidance met the criteria of a PCD loan as of the date of adoption. PCD loans are initially recorded at fair value along with an ACL determined using the same methodology as originated loans. The sum of the loan's purchase price and ACL becomes its initial amortized cost basis. The difference between the initial amortized cost basis and the par value of the loan is a noncredit discount or premium, which is amortized into interest income over the life of the loan. Subsequent changes to the ACL are recorded through provision for credit losses. The amortized cost basis as of December 31, 2022 of PCD loans was $2.4 million.

Prior to January 1, 2022, ASC 310-30 required the following table that summarizes activity in the accretable yield for PCI loans at December 31, 2021:

Balance at beginning of period	$ 141
Additions	—
Accretion	(27)
Reclassification from nonaccretable difference	—
Balance at end of period	$ 114

5. MORTGAGE LOAN SERVICING

The Company sells residential mortgages to government-sponsored entities and other parties. The Company retains no beneficial interests in these loans, but may retain the servicing rights of the loans sold. Mortgage loans serviced for others are not included in the accompanying Consolidated Balance Sheets. The risks inherent in MSRs relate primarily to changes in prepayments that result from shifts in mortgage interest rates. The unpaid principal balances of mortgage loans serviced for others were $3.62 billion and $3.65 billion as of December 31, 2022 and 2021, respectively.

The Company accounts for MSRs at fair value. The Company obtains and reviews valuations from independent third parties to determine the fair value of MSRs. Key assumptions used in the estimation of fair value include prepayment speeds, discount rates, and default rates. At December 31, 2022 and 2021, the following weighted average assumptions were used in the calculation of fair value of MSRs:

	December 31,	
	2022	2021
Prepayment speed	7.10 %	9.40 %
Discount rate	9.81	9.20
Default rate	1.63	1.64

The following summarizes changes to MSRs for the years ended December 31, 2022, 2021 and 2020:

	Year Ended December 31,		
	2022	2021 (in thousands)	2020
Balance, beginning of period	$ 38,268	$ 24,833	$ 17,150
Additions	4,538	13,815	14,415
Changes in fair value due to:			
Reductions from loans paid off during the period	(2,921)	(6,019)	(4,181)
Changes in valuation inputs or assumptions	8,253	5,639	(2,551)
Balance, end of period	$ 48,138	$ 38,268	$ 24,833

For the years ended December 31, 2022, 2021 and 2020, contractually specified servicing fees, net of subservicing expense, included in other mortgage banking income amounted to $8.1 million, $7.4 million, and $4.7 million respectively.

6. OTHER REAL ESTATE LOANS AND REPOSSESSED ASSETS

Income and expenses applicable to foreclosed and repossessed assets include the following:

	Year Ended December 31,		
	2022	2021 (in thousands)	2020
Loss on sales of real estate, net	$ —	$ (198)	$ (86)
Net loss on sales of repossessed assets	(30)	(45)	45
Operating expenses	48	(155)	37
	$ 18	$ (398)	$ (4)

At December 31, 2022 and 2021, there were no foreclosed assets and repossessed assets were automobiles with a total recorded value of $54,000 and $53,000, respectively. All foreclosed and repossessed assets are held for sale. Mortgage loans in the process of foreclosure totaled $2.6 million and $2.9 million as of December 31, 2022 and 2021, respectively, and are reported in loans.

7. PROPERTY AND EQUIPMENT

A summary of the cost and accumulated depreciation of property and equipment follows:

	December 31,	
	2022	2021
	(in thousands)	
Land	$ 12,251	$ 12,251
Buildings and leasehold improvements	50,693	49,790
Furniture, equipment and vehicles	17,345	16,665
Fixed assets in process	618	534
	80,907	79,240
Less accumulated depreciation and amortization	(31,862)	(28,495)
Property and equipment, net	$ 49,045	$ 50,745

Depreciation and amortization expense amounted to $3.9 million, $4.4 million and $4.0 million for the years ended December 31, 2022, 2021 and 2020, respectively. During the year ended December 31, 2021, land and a building with a total net book value of

$881,000 were transferred to assets held for sale and a write down of $196,000 was recognized when the property was sold in the second quarter of 2022.

At December 31, 2022 and 2021, fixed assets in process represents building improvements and equipment not placed in service.

8. GOODWILL AND OTHER INTANGIBLE ASSETS

Goodwill

There were no changes in the carrying value of goodwill for the years ended December 31, 2022 and 2021.

The Bank and HarborOne Mortgage are identified as reporting units for purposes of goodwill impairment testing. At December 31, 2022 and 2021, the carrying value of the Bank's goodwill was $59.0 million as of both dates, and the carrying value of HarborOne Mortgage's goodwill was $10.8 million as of both dates.

Impairment exists when a reporting unit's carrying value exceeds its fair value. At October 31, 2022 the Company's reporting units had positive equity. The Company elected to perform a qualitative assessment for the Bank's annual impairment test to determine if it was more likely than not that the fair value of the reporting unit exceeded the carrying value, including goodwill. The qualitative assessment indicated that it was more likely than not that the fair value of the Bank exceeded the carrying value, including goodwill, resulting in no impairment.

For HarborOne Mortgage's annual goodwill impairment test, the Company elected to update the baseline valuation and performed a quantitative assessment. The quantitative assessment of goodwill includes comparing a reporting unit's calculated fair value to its carrying value. The calculation of fair value requires significant judgments including estimation of future cash flows, which is dependent on internal forecasts, estimation of the projected long-term growth rate and determination of the Company's weighted average cost of capital. Changes in these estimates and assumptions could materially affect the determination of fair value and/or conclusions on goodwill impairment.

The process of evaluating the fair value is highly subjective and requires significant judgment and estimates. The Company considered the income and market approaches to determine its best estimates of fair value, which incorporated the following significant assumptions:

- Revenue projections, including revenue growth during the forecast periods;
- EBITDA margin projections over the forecast periods;
- Discount rates

As of October 31, 2022, we determined that HarborOne Mortgage's fair value exceeded carrying value, although the fair value cushion was not substantial.

The goodwill at HarborOne Mortgage is at risk of future impairment if projected operating results are not met or other inputs into the fair value measurement model change. As of December 31, 2022, the Company assessed whether there were additional events or changes in circumstances since its annual goodwill impairment test that would indicate that it was more likely than not that the fair value of the reporting unit was less than the reporting unit's carrying amounts that would require an interim impairment assessment after October 31, 2022. The Company determined there had been no such indicators, therefore, no interim goodwill impairment assessment as of December 31, 2022 was performed. As of December 31, 2022, the Company believes there were no indications of impairment related to HarborOne Mortgage's $10.8 million of goodwill.

Other intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the assets may not be recoverable.

Core Deposit Intangible

The Company recognized core deposit intangibles ("CDI") of $9.0 million in connection with the Coastway acquisition. The Company's change in the gross amount of core deposit intangibles and the related accumulated amortization consisted of the following:

	December 31,	
	2022	2021
	(in thousands)	
Gross amount of CDI:		
Balance, beginning of period	$ 8,952	$ 8,952
Additions due to acquisitions	—	—
Balance, end of period	8,952	8,952
Accumulated amortization:		
Balance, beginning of period	(5,788)	(4,582)
Amortization	(892)	(1,206)
Balance, end of period	(6,680)	(5,788)
Net CDI, end of period	$ 2,272	$ 3,164

The estimated aggregate amortization expense related to the Company's core deposit intangible assets is $757,000 per year from 2023 until 2025. The weighted average original amortization period was 7.3 years.

9. DEPOSITS

A summary of deposit balances, by type, is as follows:

	December 31,	
	2022	2021
	(in thousands)	
NOW and demand deposit accounts	$ 1,060,268	$ 1,056,784
Regular savings and club accounts	1,468,172	1,138,979
Money market deposit accounts	861,704	858,970
Total non-certificate accounts	3,390,144	3,054,733
Term certificate accounts greater than $250,000	110,360	108,426
Term certificate accounts less than or equal to $250,000	387,615	419,490
Brokered deposits	301,380	100,000
Total certificate accounts	799,355	627,916
Total deposits	$ 4,189,499	$ 3,682,649

The Company has established a relationship to participate in a reciprocal deposit program with other financial institutions. The reciprocal deposit program provides access to FDIC-insured deposit products in aggregate amounts exceeding the current limits for depositors. At December 31, 2022 and 2021, total reciprocal deposits were $28.6 million and $43.8 million, respectively, consisting primarily of demand deposit accounts.

A summary of certificate accounts by maturity at December 31, 2022 is as follows:

	Amount	Weighted Average Rate
	(dollars in thousands)	
Within 1 year	$ 571,485	2.46 %
Over 1 year to 2 years	196,350	1.00
Over 2 years to 3 years	24,121	1.88
Over 3 years to 4 years	5,563	0.66
Over 4 years to 5 years	1,940	1.66
Total certificate deposits	799,459	2.07 %
Less unaccreted acquisition discount	(104)	
Total certificate deposits, net	$ 799,355	

10. BORROWINGS

Borrowed funds at December 31, 2022 and 2021 consist of FHLB advances. Short-term advances were $385.0 million at December 31, 2022, with a weighted average rate of 4.32%. There were no short-term advances at December 31, 2021. Long-term advances are summarized by maturity date below:

	2022		2021		
	Amount by Scheduled Maturity*	Weighted Average Rate (2)	Amount by Scheduled Maturity*	Amount by Call Date (1)	Weighted Average Rate (2)
			(dollars in thousands)		
Year ending December 31:					
2022	$ —	— %	$ —	40,000	— %
2023	180	1.40	185	185	1.46
2024	13,400	1.39	13,400	13,400	1.39
2025	987	—	40,987	987	1.32
2026	—	—	—	—	—
2027 and thereafter	1,108	2.00	1,139	1,139	2.00
	$ 15,675	1.35 %	$ 55,711	$ 55,711	1.35 %

* Includes an amortizing advance requiring monthly principal and interest payments.

(1) Callable FHLB advances are shown in the respective periods assuming that the callable debt is redeemed at the call date, while all other advances are shown in the periods corresponding to their scheduled maturity date. There were no callable advances at December 31, 2022.

(2) Weighted average rates are based on scheduled maturity dates.

On September 30, 2021, the Company prepaid $20.0 million in FHLB borrowings that had maturity dates in 2023 and an aggregate prepayment penalty of $1.1 million was incurred and expensed, as the advances were not replaced with other FHLB borrowings.

The FHLB advances are secured by a blanket security agreement which requires the Bank to maintain certain qualifying assets as collateral, principally residential mortgage loans and certain multi-family and commercial real estate loans held in the Bank's portfolio. The carrying value of the loans pledged as collateral for these borrowings totaled $1.71 billion and $1.22 billion at December 31, 2022 and 2021, respectively. As of December 31, 2022, the Company had $797.4 million of available borrowing capacity with the FHLB.

The Company also has additional borrowing capacity under a $25.0 million unsecured federal funds line with a correspondent bank and a secured line of credit with the Federal Reserve Bank of Boston secured by 64% of the carrying value of indirect auto and commercial loans with principal balances amounting to $100.2 million and $101.4 million, respectively, of which no amount was outstanding under either line at December 31, 2022 and 2021.

On August 30, 2018, the Company issued $35.0 million in fixed-to-floating rate subordinated notes due 2028 (the “Notes”) in a private placement transaction to institutional accredited investors. The Notes bear interest at annual fixed rate of 5.625% until September 1, 2023 at which time the interest rate resets quarterly to an interest rate per annum equal to the three-month LIBOR plus 278 basis points. We anticipate that on September 1, 2023, the interest rate will reset quarterly to an interest rate per annum equal to the three-month CME Term SOFR plus 278 basis points. Interest is payable semi-annually on March 1 and September 1 each year through September 1, 2023 and quarterly thereafter. The Notes can be redeemed partially or in whole, prior to the maturity date beginning September 1, 2023 and on any scheduled interest payment date thereafter, at par. The Notes are carried on the Consolidated Balance Sheets net of unamortized issuance costs of $715,000 and $841,000 at December 31, 2022 and 2021, respectively.

11. INCOME TAXES

Allocation of the federal and state income taxes between current and deferred portions for the years ended December 31, 2022, 2021 and 2020 are as follows:

	2022	2021	2020
		(in thousands)	
Current tax provision:			
Federal	$ 8,962	$ 10,693	$ 11,591
State	4,016	4,815	5,240
	12,978	15,508	16,831
Deferred tax provision (benefit):			
Federal	2,000	4,451	(2,124)
State	1,162	1,976	(1,490)
	3,162	6,427	(3,614)
Income tax provision	$ 16,140	$ 21,935	$ 13,217

The reasons for the differences between the statutory federal income tax and the actual income tax provision for the years ended December 31, 2022, 2021 and 2020 are summarized as follows:

	2022	2021	2020
		(dollars in thousands)	
Statutory tax rate	21%	21%	21%
Statutory tax provision	$ 12,963	$ 16,895	$ 12,182
Increase (decrease) resulting from:			
State taxes, net of federal tax benefit	4,092	5,365	2,962
Bank-owned life insurance	(416)	(425)	(465)
Employee Stock Ownership Plan expenses	303	280	56
Tax-exempt income	(932)	—	(22)
Net reduction in uncertain federal tax positions	(115)	(712)	(1,864)
Other, net	245	532	368
Income tax provision	$ 16,140	$ 21,935	$ 13,217

The tax effects of each item that give rise to deferred taxes at December 31, 2022 and 2021 are as follows:

	2022	2021
	(in thousands)	
Deferred tax assets:		
Allowance for credit losses	$ 14,097	$ 12,745
Employee benefit plans	5,848	5,478
Mark-to-market loans	987	1,469
Accrued expenses not deducted for tax purposes	1,336	1,656
HarborOne Mortgage loan repurchase reserve	996	999
Net unrealized loss on securities available for sale	15,045	801
Other	331	602
	38,640	23,750
Deferred tax liabilities:		
Net unrealized gain on securities available for sale	—	—
Derivatives	(3,726)	(2,552)
Deferred income annuities	(1,835)	(1,706)
Depreciation and amortization	(1,009)	(1,223)
Deferred loan fees	(4,188)	(2,820)
Mortgage servicing rights	(13,372)	(10,585)
Core deposit intangible	(638)	(889)
Other	—	—
	(24,768)	(19,775)
Net deferred tax asset	$ 13,872	$ 3,975

A summary of the change in the net deferred tax asset (liability) for the years ended December 31, 2022, 2021 and 2020 is as follows:

	2022	2021	2020
		(in thousands)	
Balance at beginning of year	$ 3,975	$ 9,557	$ 6,034
Deferred tax (provision) benefit	(3,162)	(6,427)	3,614
Adoption of CECL	736	—	—
Change in directors' retirement plan	(59)	—	394
Change in cash flow hedge	(1,862)	(860)	—
Change in securities available for sale	14,244	1,705	(485)
Balance at end of year	$ 13,872	$ 3,975	$ 9,557

The Company's income tax returns are subject to review and examination by federal and state taxing authorities. The Company is currently open to audit under the applicable statutes of limitations by the Internal Revenue Service ("IRS") and the state taxing authorities for the years ended December 31, 2019 through 2022.

During 2022, tax benefits were recorded on the Company's financial statements to reflect the income tax benefit for tax-exempt interest not previously recognized. Amended tax returns were filed for 2018 through 2020 to reflect this net impact of this change. The tax impact was approximately $340,000 for the amended returns and $227,000 for the 2021 tax period. A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	2022	2021 (in thousands)	2020
Balance at beginning of year	$ 655	$ 1,162	$ 3,052
Additions based on tax positions related to current year	—	—	—
Additions for tax positions for prior years	244	247	168
Reductions for tax positions for prior years	(300)	(754)	(2,058)
Settlements	—	—	—
Balance at end of year	$ 599	$ 655	$ 1,162

The balance of unrecognized tax benefits, the amount of related interest accrued and what Management believes to be the range of reasonably possible changes in the next 12 months, are:

Unrecognized tax benefits	$ 405
Accrued interest on unrecognized tax benefits	194
Portion that, if recognized, would reduce tax expense and effective tax rate	599
Reasonably possible reduction to the balance of unrecognized tax in subsequent year	286
Portion that, if recognized, would reduce tax expense and effective tax rate	286

In assessing the realizability of deferred tax assets, Management considers whether it is more likely than not that some or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which those temporary differences become deductible. Management considers the scheduled reversal of deferred tax liabilities, projected future taxable income and tax planning strategies in making this assessment. Based on the level of historical taxable income and projections for future taxable income over the periods the deferred tax assets are expected to be deductible, Management believes it is more likely than not that its deferred tax assets are realizable. It should be noted, however, that factors beyond Management's control, such as the general economy and real estate values, can affect future levels of taxable income, and no assurance can be given that sufficient taxable income will be generated to fully absorb gross deductible temporary differences.

12. OTHER COMMITMENTS AND CONTINGENCIES

Adoption of Topic 326

As disclosed in Note 1, Topic 326 requires the measurement of expected lifetime credit losses for unfunded commitments that are considered off-balance sheet credit exposures. The Company adopted the provisions of Topic 326 effective January 1, 2022 using the modified retrospective method. Therefore, the prior period comparative information has not been adjusted and continues to be reported under GAAP in effect prior to the adoption of Topic 326. As a result of adopting Topic 326, the Company recognized an increase in the ACL on unfunded commitments of $3.9 million on January 1, 2022.

The ACL on unfunded commitments amounted to $4.9 million at December 31, 2022. The activity in the ACL on unfunded commitments for the year ended December 31, 2022 is presented below:

	Residential Real Estate	Commercial Real Estate	Commercial Construction	Commercial and Industrial	Consumer	Total
	(in thousands)					
Balance at December 31, 2021	$ —	$ —	$ —	$ —	$ —	$ —
Adoption of Topic 326	318	380	2,561	658	14	3,931
Provision	18	248	518	212	—	996
	$ 336	$ 628	$ 3,079	$ 870	$ 14	$ 4,927

Loan Commitments

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 advance funds on various lines of credit. Those commitments involve, to varying degrees, elements of credit and interest rate risk in excess of the amount recognized in the accompanying Consolidated Financial Statements.

The Company's exposure to credit loss is represented by the contractual amount of these commitments. The Company uses the same credit policies in making commitments as it does for on-balance sheet instruments.

The following off-balance sheet financial instruments were outstanding at December 31, 2022 and 2021. The contract amounts represent credit risk.

	December 31, 2022	December 31, 2021
	(in thousands)	
Commitments to grant residential real estate loans-HarborOne Mortgage	$ 57,916	$ 142,781
Commitments to grant other loans	43,700	27,029
Unadvanced funds on home equity lines of credit	251,759	211,120
Unadvanced funds on revolving lines of credit	351,382	223,110
Unadvanced funds on construction loans	262,945	194,101

Commitments to extend credit and unadvanced portions of construction loans are agreements to lend to a customer, as long as there is no violation of any condition established in the contract. Commitments to grant loans generally have fixed expiration dates or other termination clauses and may require payment of a fee. The commitments for unadvanced funds on construction loans and home equity and revolving lines of credit may expire without being drawn upon; therefore, the total commitment amounts do not necessarily represent future cash requirements. The Company evaluates each customer's credit worthiness on a case-by-case basis. Commitments to grant loans, unadvanced construction loans and home equity lines of credit are collateralized by real estate, while revolving lines of credit are unsecured.

Employment Agreement

The Company has an employment agreement with an executive officer. The term of the agreement commenced on the effective date of the signed agreement and continues thereafter until terminated, as defined by the agreement. The agreement generally provides for a specified minimum annual compensation and the continuation of benefits currently received. However, such employment can be terminated for cause, as defined, without incurring any continuing obligations. In addition, the agreement provides for severance payment to the officer following a change in control, as defined.

Reserve for Residential Mortgage Loan Repurchase Losses

The Company sells residential mortgage loans on a "whole-loan" basis to Fannie Mae and Freddie Mac, and to non-agency investors. These loan sales occur under industry standard contractual provisions that include various representations and warranties, which typically cover ownership of the loan, compliance with loan criteria set forth in the applicable agreement, validity of the lien securing the loan and other similar matters. The Company may be required to repurchase certain loans sold with identified defects, indemnify the investor, or reimburse the investor for any credit losses incurred. The Company establishes mortgage repurchase reserves related to various representations and warranties that reflect Management's estimate for which we have a repurchase obligation. The reserves are established by a charge to loan expenses in our Consolidated Statements of Income. At December 31, 2022 and 2021, this reserve totaled $3.6 million each year, and it is included in other liabilities and accrued expenses on the Consolidated Balance Sheets.

The repurchase reserve is applicable to loans the Company originated and sold with representations and warranties, which is representative of the entire sold portfolio. The repurchase loss liability is estimated by origination year and to the extent that repurchase demands are made by investors, we may be able to successfully appeal such repurchase demands. The reserve considers anticipated future losses and the Company's lack of historical experience with the make-whole demands. The reserve for residential mortgage loan repurchase losses represents our best estimate of the probable loss that we may incur due to the representations and warranties in our loan sales contracts with investors. Repurchase losses depend upon economic factors and other external conditions that may change over the life of the underlying loans. Additionally, lack of access to the servicing records of loans sold on a service-released basis adds difficulty to the estimation process. To the extent that future investor repurchase demand and appeals success differ from past experience, the Company could have increased demands and increased loss severities on repurchases, causing future additions to the repurchase reserve.

Certain loans were sold with recourse provisions, and at December 31, 2022 and 2021, the related maximum contingent liability related to loans sold amounted to $305,000 and $1.3 million, respectively. Based on discounted cash flow of projected losses on sold loans in this portfolio at December 31, 2022 and 2021, the Company had no recourse liability.

Other

During the fiscal year ended December 31, 2022, except as set forth below, the Company was not involved in any material pending legal proceedings as a plaintiff or as a defendant other than routine legal proceedings occurring in the ordinary course of business. Management believes that those routine legal proceedings involve, in the aggregate, amounts that are immaterial to the Company's financial condition or results of operations.

The Company reached an agreement-in-principle to settle a purported class action lawsuit concerning overdraft fees on re-presented transactions. The matter, which asserted claims for breach of contract against HarborOne Bank, was filed in the Massachusetts Superior Court in June 2022 and captioned *Rita Meaden v. HarborOne Bank*. Also in June 2022, the Company received notice of a demand letter served on the Bank by the same plaintiff pursuant to the Massachusetts Consumer Protection Act, M.G.L Ch. 93A. The complaint and demand letter sought monetary damages for the named plaintiff and the putative class, plus double or treble damages and reasonable attorneys' fees, as may be allowed under Chapter 93A. The Bank retained outside litigation counsel in this matter, and discussions to find a mutually acceptable resolution, including mediation before a retired Massachusetts Superior Court judge, proceeded between the parties. On February 28, 2023, the case was refiled in federal court in Massachusetts, where the parties have requested preliminarily approval of a settlement agreement, under which the Bank expects to pay damages of approximately $875,000 in exchange for the dismissal with prejudice and release of all claims that have been or could have been asserted in the filed class action lawsuit on behalf of the plaintiff and all putative settlement class members. The proposed settlement remains subject to preliminary court approval, notice to class members, and final court approval. As of December 31, 2022, the Company had accrued $950,000 for the settlement expense, including related costs.

13. DERIVATIVES

The Company's derivative financial instruments are used to manage differences in the amount, timing and duration of the Company's known or expected cash receipts and its known or expected cash payments principally to manage the Company's interest rate risk. Additionally, the Company enters into interest rate derivatives to accommodate the business requirements of its customers. All derivatives are recognized as either assets or liabilities on the balance sheet and are measured at fair value. The accounting for changes in the fair value of a derivative instrument depends upon whether or not it qualifies as a hedge for accounting purposes, and further, by the type of hedging relationship.

Interest Rate Swaps Designated as a Cashflow Hedge

As part of its interest rate risk management strategy, the Company utilizes interest rate swap agreements to help manage its interest rate risk positions. The notional amount of the interest rate swaps do not represent the amount exchanged by the parties. The exchange of cash flows is determined by reference to the notional amounts and the other terms of the interest rate swap agreements. The changes in fair value of derivatives designated as cashflow hedges are recorded in other comprehensive income and subsequently reclassified to earnings when gains or losses are realized.

As of December 31, 2022, the Company had one interest rate swap agreement with a notional amount of $100.0 million that was designated as a cashflow hedge of certificates of deposits. The interest rate swap agreement has an average maturity of 2.27 years, the current weighted average fixed rate paid is 0.67%, the weighted average three-month LIBOR swap receive rate is 3.77% and the fair value is $8.3 million. The Company expects approximately $4.3 million related to the cashflow hedge to be reclassified to interest expense, from other comprehensive income, in the next twelve months.

Derivative Loan Commitments

Mortgage loan commitments qualify as derivative loan commitments if the loan that will result from exercise of the commitment will be held for sale upon funding. The Company enters into commitments to fund residential mortgage loans at specified times in the future, with the intention that these loans will subsequently be sold in the secondary market. A mortgage loan commitment binds the Company to lend funds to a potential borrower at a specified interest rate and within a specified period of time, generally up to 60 days after inception of the rate lock.

Outstanding derivative loan commitments expose the Company to the risk that the price of the loans arising from exercise of the loan commitment might decline from inception of a rate lock to funding of the loan due to increases in mortgage interest rates. If interest rates increase, the value of these loan commitments decreases. Conversely, if interest rates decrease, the value of these loan commitments increases.

Forward Loan Sale Commitments

The Company utilizes both "mandatory delivery" and "best efforts" forward loan sale commitments to mitigate the risk of potential decreases in the values of loans that would result from the exercise of the derivative loan commitments.

With a "mandatory delivery" contract, the Company commits to deliver a certain principal amount of mortgage loans to an investor at a specified price on or before a specified date. If the Company fails to deliver the amount of mortgages necessary to fulfill the commitment by the specified date, it is obligated to pay a "pair-off" fee, based on then-current market prices, to the investor to compensate the investor for the shortfall.

With a "best efforts" contract, the Company commits to deliver an individual mortgage loan of a specified principal amount and quality to an investor if the loan to the underlying borrower closes. Generally, the price the investor will pay the seller for an individual loan is specified prior to the loan being funded (*e.g.*, on the same day the lender commits to lend funds to a potential borrower).

The Company expects that these forward loan sale commitments will experience changes in fair value opposite to the change in fair value of derivative loan commitments.

Interest Rate Swaps

The Company enters into interest rate swap agreements that are transacted to meet the financing needs of its commercial customers. Offsetting interest rate swap agreements are simultaneously transacted with a third-party financial institution to effectively eliminate the Company's interest rate risk associated with the customer swaps. The primary risks associated with these transactions arise from exposure to the ability of the counterparties to meet the terms of the contract. At December 31, 2022, there were no securities pledged to secure the Company's liability for the offsetting interest rate swaps (see Note 2). The interest rate swap notional amount below is the aggregate notional amount of the customer swap and the offsetting third-party swap. The Company also assesses the significance of the impact of the credit valuation adjustments on the overall valuation of its derivative positions and determines whether the credit valuation adjustments are significant to the overall valuation of its derivatives. During 2021, a credit valuation adjustment related to an interest rate swap was determined to be significant and required a negative fair value adjustment of $431,000, which is included in other income. During the first quarter of 2022, the interest rate swap was terminated, which resulted in a $330,000 reversal of the negative fair value adjustment recorded in 2021.

Risk Participation Agreements

The Company has entered into risk participation agreements with correspondent institutions and shares in any interest rate swap losses incurred as a result of the commercial loan customers' termination of a loan level interest rate swap agreement prior to maturity. The Company records these risk participation agreements at fair value. The Company's maximum credit exposure is based on its proportionate share of the settlement amount of the referenced interest rate swap. Settlement amounts are generally calculated based on the fair value of the swap plus outstanding accrued interest receivables from the customer.

The following tables present the outstanding notional balances and fair values of outstanding derivative instruments:

		Assets		Liabilities	
	Notional Amount	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
			(in thousands)		
December 31, 2022:					
Derivatives designated as Hedging Instruments					
Interest rate swaps	$ 100,000	Other assets	$ 8,314	Other liabilities	$ —
Derivatives not designated as Hedging Instruments					
Derivative loan commitments	$ 27,935	Other assets	$ 238	Other liabilities	$ 65
Forward loan sale commitments	29,000	Other assets	249	Other liabilities	39
Interest rate swaps	772,588	Other assets	28,525	Other liabilities	28,525
Risk participation agreements	164,528	Other assets	—	Other liabilities	—
Total			$ 37,326		$ 28,629
December 31, 2021:					
Derivatives designated as Hedging Instruments					
Interest rate swaps	$ 100,000	Other assets	$ 1,663	Other liabilities	$ —
Derivatives not designated as Hedging Instruments					
Derivative loan commitments	$ 86,134	Other assets	$ 1,527	Other liabilities	$ 95
Forward loan sale commitments	96,000	Other assets	56	Other liabilities	94
Interest rate swaps	740,235	Other assets	18,874	Other liabilities	19,214
Risk participation agreements	139,109	Other assets	—	Other liabilities	—
Total			$ 22,120		$ 19,403

The following table presents the recorded net gains and losses pertaining to the Company's derivative instruments:

	Year Ended December 31,		
	2022	2021	2020
Derivatives designated as hedging instruments			
(Loss) gain in OCI on derivatives (effective portion), net of tax	$ 4,783	$ 2,210	$ (1,013)
(Loss) gain reclassified from OCI into interest income or interest expense (effective portion)	$ 1,164	$ (513)	$ (46)
Derivatives not designated as hedging instruments			
Changes in fair value of derivative loan commitments			
Mortgage banking income	$ (1,259)	$ (10,850)	$ 11,072
Changes in fair value of forward loan sale commitments			
Mortgage banking income	248	2,166	(2,073)
Changes in fair value of interest rate swaps			
Other income	330	(431)	—
Total	$ (681)	$ (9,115)	$ 8,999

14. OPERATING LEASE RIGHT-OF-USE ASSETS AND LIABILITIES

Operating lease ROU assets, included in other assets, were $26.9 million and $26.8 million at December 31, 2022 and 2021, respectively.

Operating lease liabilities, included in other liabilities and accrued expenses, were $28.6 million and $28.4 million at December 31, 2022 and 2021, respectively. As of December 31, 2022, the Company does not have leases that have not yet commenced. At December 31, 2022, lease expiration dates ranged from three months to 35.7 years and have a weighted average remaining lease term of 17.3 years.

Future minimum lease payments under non-cancellable leases and a reconciliation to the amount recorded as operating lease liabilities as of December 31, 2022 were as follows:

	December 31, 2022
	(in thousands)
2023	$ 3,141
2024	2,808
2025	2,504
2026	2,461
2027	2,409
Thereafter	22,014
Total lease payments	35,337
Imputed interest	(6,747)
Total present value of operating lease liabilities	$ 28,590

The weighted-average discount rate and remaining lease term for operating leases were as follows:

	December 31, 2022	December 31, 2021
Weighted-average discount rate	2.02 %	1.94 %
Weighted-average remaining lease term (years)	17.33	16.77

Rental expense for operating leases is recognized on a straight-line basis over the lease term. Variable lease components, such as fair market value adjustments, are expensed as incurred and not included in ROU assets and operating lease liabilities.

The following table presents the components of total lease expense:

	Year Ended December 31, 2022	Year Ended December 31, 2021
	(in thousands)	
Lease Expense:		
Operating lease expense	$ 3,301	$ 2,737
Short-term lease expense	138	162
Variable lease expense	—	—
Sublease income	(13)	—
Total lease expense	$ 3,426	$ 2,899
Other Information		
Cash paid for amounts included in the measurement of lease liabilities- operating cash flows for operating leases	3,261	2,861
Operating Lease - Operating cash flows (Liability reduction)	2,722	2,370
Right-of-use assets obtained in exchange for new operating lease liabilities	3,257	29,718

15. COMPENSATION AND BENEFIT PLANS

Defined Contribution Plan

The Company provides saving plans which qualify under Section 401(k) of the Internal Revenue Code and provides for voluntary contributions by participating employees up to the maximum amount permitted by law. For the years ended December 31, 2022, 2021 and 2020, the Bank contributed 4%, 5% and 5%, respectively, of each eligible employee's compensation up to the social security wage base. For the years ended December 31, 2022, 2021 and 2020, HarborOne Mortgage matched 50% of the first 4% of employee contributions up to a maximum of $2,000. Contributions expensed were $1.6 million, $1.9 million and $1.8 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Management Incentive Program

The Company from time to time creates incentive compensation plans for senior management and other officers to participate in at varying levels. In addition, the Company may also pay a discretionary bonus to senior management, officers, and/or non-officers of the Company. These programs are administered by the Compensation Committee of the Board of Directors. The expense for the incentive plans amounted to $4.1 million, $4.8 million and $4.8 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Supplemental Retirement Plans

The Company provides supplemental retirement benefits to one senior executive officer and one retired senior executive officer of the Company under the terms of Supplemental Executive Retirement Plan Agreement (the "SERPs"). Benefits to be paid under the SERPs are based primarily on the officer's compensation and estimated mortality. At December 31, 2022, 2021 and 2020, included in other liabilities and accrued expenses is the Company's obligation under the SERPs of $10.1 million, $9.2 million and $8.0 million, respectively. The retirement benefits, as defined in the SERPs, are accrued by charges to compensation expense over the required service periods of the officers. Expense related to these benefits was $1.5 million, $1.2 million and $955,000 for the years ended December 31, 2022, 2021 and 2020, respectively.

Split-Dollar Life Insurance Arrangement

The Company has an endorsement split-dollar life insurance agreement with a retired executive officer whereby the Company will pay to the retired executives' estates or beneficiaries a portion of the death benefit that the Company will receive as beneficiary of such policy. At December 31, 2022 and 2021, included in other liabilities and accrued expenses is the Company's obligation under the arrangement of $394,000 and $352,000, respectively. There was no expense for this benefit for the year ended December 31, 2021 and expense associated with this post-retirement benefit for the years ended December 31, 2022 and 2020 amounted to $42,000 and $21,000, respectively. The cash surrender value of the policy is included in bank-owned life insurance on the Consolidated Balance Sheets.

Deferred Compensation Plans

The Company is the sole owner of an annuity policy pertaining to one of the Company's executives that is included in retirement plan annuities on the balance sheet. The Company has an agreement with this executive whereby upon retirement the Company will pay to the executive an amount equal to the cash surrender value of the annuity less premiums paid accumulated at an interest rate of 1.5% per year. At December 31, 2022, 2021 and 2020, included in other liabilities and accrued expenses is the Company's obligation under the plan of $454,000, $419,000 and $385,000, respectively. For the years ended December 31, 2022, 2021 and 2020, the expense amounted to $35,000, $34,000 and $32,000, respectively.

The Company has agreements with one executive officer and one former executive officer whereby the Company will pay the cost of the premium for individual supplemental medical and prescription drug coverage for their lifetime upon retirement at age 65 or later. Spousal coverage is provided each year the executive is eligible for coverage and the spouse is age 65 or over. At December 31, 2022, 2021 and 2020, included in other liabilities and accrued expenses is the Company's obligation under the plan of $160,000, $380,000 and $344,000, respectively. For the year ended December 31, 2022, a $9,000 credit to expense was recognized reflecting updated calculation assumptions. For the years ended December 31, 2021 and 2020, the expense amounted to $36,000 and $47,000, respectively.

Post-Retirement Life Insurance

Employees who are covered under the Company's bank-owned life insurance program can elect to participate in the benefits of the program while employed by the Company. The Company granted post-employment coverage to certain executives. This post retirement benefit is included in other liabilities and accrued expenses at December 31, 2022, 2021 and 2020 in the amount of $295,000, $261,000 and $234,000, respectively. For the years ended December 31, 2022, 2021 and 2020, the expense amounted to $34,000, $27,000 and $47,000, respectively.

Employee Stock Ownership Plan

On June 29, 2016, the Company established an ESOP to provide eligible employees the opportunity to own Company stock. The Company added shares to the ESOP as part of the Offering completed August 14, 2019. The plan is a tax-qualified retirement plan for the benefit of the eligible Company employees. The ESOP shares were purchased through a loan from the Company and as the debt is repaid, shares are released. Contributions are allocated to eligible participants on the basis of compensation, subject to federal tax limits. The unreleased shares are deducted from stockholders' equity as unearned ESOP shares in the accompanying Consolidated Balance Sheets. The number of shares committed to be released per year is 230,723 through 2035 and 124,148 from 2036 through 2038.

The following table presents share information held by the ESOP:

	December 31,	
	2022	2021
Allocated shares	1,140,538	939,825
Shares committed to be allocated	230,723	230,722
Unallocated shares	3,141,117	3,371,840
Total shares	4,512,378	4,542,387
Fair value of unallocated shares	$ 43,661,526	$ 50,038,115

Total compensation expense recognized in connection with the ESOP was $3.3 million, $3.2 million and $2.1 million for the years ended December 31, 2022, 2021 and 2020, respectively.

ESOP Restoration Plan

During 2016, the Company also adopted an ESOP Restoration Plan ("RESOP") for the benefit of ESOP eligible employees whose annual compensation exceeds the amount of annual compensation permitted to be recognized under the ESOP by the Internal Revenue Code. Under the RESOP, eligible participants would receive a credit each year equal to the amount they would have received under the ESOP but for the Internal Revenue Service imposed compensation limit. Any benefits earned under the RESOP would become payable at the earliest of six months and a day after the participant's separation of service from the Bank, the participant's death, a change in control of the Company or upon termination of the RESOP. These benefits are accrued over the period during which employees provide services to earn these benefits. For the year ended December 31, 2022, 2021 and 2020, compensation expense recognized in connection with the RESOP was $636,000, $656,000 and $487,000, respectively.

Directors' Retirement Plan

The Company has an unfunded director fee continuation plan which provides postretirement benefits to eligible directors of the Company. Participants in the plan must have at least six years of service as a director to be vested in the benefit, which is determined based on number of years of service. The Company elected to freeze the plan in 2017. At December 31, 2022, the benefit obligation was $2.0 million.

16. STOCK-BASED COMPENSATION

Under the HarborOne Bancorp, Inc. 2020 Equity Incentive Plan (the "2020 Equity Plan") adopted on September 29, 2020, the Company may grant stock options, restricted stock awards, restricted stock units, including performance stock units, and other equity incentives to its directors, officers and employees. Total shares reserved for issuance under the 2020 Equity Plans are 4,500,000. The 2017 Stock Option and Incentive Plan (the "2017 Equity Plan" and together with the 2020 Equity Plan, the "Equity Plans"), was adopted on August 9, 2017. The Company will only award shares under the 2020 Equity Plan.

Expense related to awards granted to employees is recognized as compensation expense, and expense related to awards granted to directors is recognized as directors' fees within noninterest expense. Total expense for the Equity Plans was $3.3 million, $3.8 million and $3.7 million for the years ended December 31, 2022, 2021 and 2020, respectively.

Stock Options

Stock options are generally granted with the exercise price equal to the market price of the Company's common stock at the date of the grant with vesting periods ranging from one to three years and have 10-year contractual terms.

The fair value of each option grant is estimated on the date of the grant using the Black-Scholes option-pricing model with the following assumptions:

- Volatility is based on peer group volatility due to lack of sufficient trading history for the Company.
- Expected life represents the period of time that the option is expected to be outstanding, taking into account the contractual term and the vesting period.
- Expected dividend yield is based on the Company's history and expectation of dividend payouts.
- The risk-free rate is based on the U.S. Treasury yield curve in effect at the time of grant for a period equivalent to the expected life of the option.

During the years ended December 31, 2022 and 2021, the Company made no awards of nonqualified options to purchase shares of common stock.

A summary of the status of the Company's stock option grants for the year ended December 31, 2022 is presented in the table below:

	Outstanding				Nonvested	
	Stock Option Awards	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value	Stock Option Awards	Weighted Average Grant Date Fair Value
Balance at January 1, 2022	2,043,563	$ 9.85			188,407	$ 2.48
Exercised	(868,808)	9.63			—	—
Vested	—	—			(188,407)	2.48
Balance at December 31, 2022	1,174,755	$ 10.02	5.07	$ 4,556,703	—	$ —
Exercisable at December 31, 2022	1,174,755	$ 10.02	5.07	$ 4,556,703		

Restricted Stock

Shares issued upon vesting may be either authorized but unissued shares or reacquired shares held by the Company. Any shares not issued because vesting requirements are not met will again be available for issuance under the 2020 Equity Plan. The fair market value of shares awarded, based on the market price at the date of grant, is unearned compensation to be amortized over the applicable vesting period.

The following table presents the activity in unvested stock awards under the Equity Plans for the year ended December 31, 2022:

	Restricted Stock Awards	Weighted Average Grant Price
Non-vested stock awards at January 1, 2022	366,782	$ 10.78
Vested	(238,855)	10.87
Granted	143,871	14.71
Forfeited	(49,730)	12.16
Non-vested stock awards at December 31, 2022	222,068	$ 13.60
Unrecognized cost inclusive of directors' awards	$ 1,889,758	
Weighted average remaining recognition period (years)	0.94	

Performance Stock Units

Performance restricted stock units vest based on a combination of performance and service requirements. The number of performance restricted stock units granted reflects the target number able to be earned under a given award. Non-vested performance restricted stock unit compensation expense is based on the most recent performance assumption available and is adjusted as assumptions change. For the year ended December 31, 2022, the performance assumption is 150% of the target.

The following table presents the activity in non-vested performance restricted stock units under the 2020 Equity Plan for the year ended December 31, 2022:

	Performance Restricted Stock Units	Weighted Average Grant Price
Non-vested performance restricted stock units at January 1, 2022	127,599	$ 11.95
Vested	(14,596)	14.09
Granted	55,098	15.28
Forfeited	(30,181)	13.54
Non-vested performance restricted stock units at December 31, 2022	137,920	$ 13.19
Unrecognized cost	$ 971,324	
Weighted average remaining recognition period (years)	1.54	

17. MINIMUM REGULATORY CAPITAL REQUIREMENTS

Minimum Regulatory Capital Requirements

The Company and Bank are subject to various regulatory capital requirements administered by the Board of Governors of the Federal Reserve and the FDIC. Failure to meet minimum capital requirements can result in mandatory and possible additional discretionary actions by regulators that, if undertaken, could have a direct material effect on the Company’s Consolidated Financial Statements.

Under the capital rules, risk-based capital ratios are calculated by dividing Tier 1, common equity Tier 1, and total risk-based capital, respectively, by risk-weighted assets. Assets and off-balance sheet credit equivalents are assigned to one of several risk-weight categories, based primarily on relative risk. The rules require banks and bank holding companies to maintain a minimum common equity Tier 1 capital ratio of 4.5%, a minimum Tier 1 capital ratio of 6.0%, and a total capital ratio of 8.0%. In addition, a Tier 1 leverage ratio of 4.0% is required. Additionally, the capital rules require a bank holding company to maintain a capital conservation buffer of common equity Tier 1 capital in an amount above the minimum risk-based capital requirements equal to 2.5% of total risk weighted assets, or face restrictions on the ability to pay dividends, pay discretionary bonuses, and to engage in share repurchases.

Under the FDIC’s prompt corrective action rules, an insured state nonmember bank is considered “well capitalized” if its capital ratios meet or exceed the ratios as set forth in the following table and is not subject to any written agreement, order, capital directive, or prompt corrective action directive to meet and maintain a specific capital level for any capital measure. The Bank must meet well capitalized requirements under prompt corrective action provisions. Prompt corrective action provisions are not applicable to bank holding companies.

A bank holding company is considered "well capitalized" if the bank holding company (i) has a total risk-based capital ratio of at least 10.0%, (ii) has a Tier 1 risk-based capital ratio of at least 6.0%, and (iii) is not subject to any written agreement order, capital directive or prompt corrective action directive to meet and maintain a specific capital level for any capital measure.

At December 31, 2022, the capital levels of both the Company and the Bank exceeded all regulatory capital requirements and their regulatory capital ratios were above the minimum levels required to be considered well capitalized for regulatory purposes. The capital levels of both the Company and the Bank at December 31, 2022 also exceeded the minimum capital requirements, including the currently applicable capital conservation buffer of 2.5%.

The Company's and Bank's actual regulatory capital ratios as of December 31, 2022 and 2021 are presented in the table below.

	Actual		Minimum Required for Capital Adequacy Purposes		Minimum Required to be Considered "Well Capitalized" Under Prompt Corrective Action Provisions	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
			(dollars in thousands)			
HarborOne Bancorp, Inc.						
December 31, 2022						
Common equity Tier 1 capital to risk-weighted assets	$ 592,610	12.8 %	$ 208,541	4.5 %	N/A	N/A
Tier 1 capital to risk-weighted assets	592,610	12.8	278,054	6.0	N/A	N/A
Total capital to risk-weighted assets	677,774	14.6	370,739	8.0	N/A	N/A
Tier 1 capital to average assets	592,610	11.5	205,897	4.0	N/A	N/A
December 31, 2021						
Common equity Tier 1 capital to risk-weighted assets	$ 608,804	16.4 %	$ 167,475	4.5 %	N/A	N/A
Tier 1 capital to risk-weighted assets	608,804	16.4	223,300	6.0	N/A	N/A
Total capital to risk-weighted assets	689,181	18.5	297,733	8.0	N/A	N/A
Tier 1 capital to average assets	608,804	13.6	179,710	4.0	N/A	N/A
HarborOne Bank						
December 31, 2022						
Common equity Tier 1 capital to risk-weighted assets	$ 525,522	11.3 %	$ 208,447	4.5 %	$ 301,090	6.5 %
Tier 1 capital to risk-weighted assets	525,522	11.3	277,929	6.0	370,572	8.0
Total capital to risk-weighted assets	575,686	12.4	370,572	8.0	463,215	10.0
Tier 1 capital to average assets	525,522	10.2	205,874	4.0	257,342	5.0
December 31, 2021						
Common equity Tier 1 capital to risk-weighted assets	$ 485,239	13.1 %	$ 166,660	4.5 %	$ 240,731	6.5 %
Tier 1 capital to risk-weighted assets	485,239	13.1	222,214	6.0	296,285	8.0
Total capital to risk-weighted assets	530,616	14.3	296,285	8.0	370,356	10.0
Tier 1 capital to average assets	485,239	10.9	178,279	4.0	222,849	5.0

Dividend Restrictions

The Bank is subject to dividend restrictions imposed by various regulators, including a limitation on the total of all dividends that the Bank may pay to the Company in any calendar year. The total of all dividends shall not exceed the Bank's net income for the current year (as defined by statute), plus the Bank's net income retained for the two previous years, without regulatory approval. Dividends from the Bank are an important source of funds to the Company to make dividend payments on its common stock and for its other cash needs. The ability of the Company and the Bank to pay dividends is dependent on regulatory policies and regulatory capital requirements. The ability to pay such dividends in the future may be adversely affected by new legislation or regulations, or by changes in regulatory policies relating to capital, safety and soundness, and other regulatory concerns.

Liquidation Account

Upon completion of its initial and second-step conversions from mutual to stock form on June 29, 2016 and August 14, 2019, respectively, the Company established a liquidation account. The liquidation account is maintained for the benefit of the eligible account holders and supplemental eligible account holders who maintain their accounts at the Bank after the offering. The liquidation account is reduced annually to the extent that such account holders have reduced their qualifying deposits as of each anniversary date. Subsequent increases will not restore an account holder's interest in the liquidation account. The Company is not permitted to pay dividends on its capital stock if the Company's shareholders' equity would be reduced below the amount of the liquidation account.

Preferred Stock

The Company has 1,000,000 shares of preferred stock, no par value, authorized, and none issued or outstanding.

Treasury Stock

Any shares repurchased under the Company's share repurchase programs were purchased in open-market transactions and are held as treasury stock. All treasury stock is held at cost.

During the year ended December 31, 2022, the Company repurchased a total of 4,338,637 shares at an average price of $14.16 for a total of $61.5 million under its share repurchase programs. During the year ended December 31, 2022, an additional 67,934 shares were acquired in connection with the satisfaction of tax obligations on vested restricted shares at an average price of $14.44 for a total of $981,000. A fifth share repurchase program of 2,450,208 shares was announced on September 21, 2022 that will commence after the fourth program is completed . During the year ended December 31, 2021, the Company repurchased a total of 5,021,067 shares at an average price of $13.68 for a total of $68.6 million under its share repurchase programs. During the year ended December 31, 2021, an additional 42,925 shares were acquired in connection with the satisfaction of tax obligations on vested restricted shares at an average price of $14.27 for a total of $613,000. During the year ended December 31, 2020, the Company purchased a total $1,533,500 shares at an average price of $10.29 for a total of $15.9 million.

18. 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 stockholders' equity section of the Consolidated Balance Sheets, such items, along with net income, are components of comprehensive income (loss).

The following tables present changes in accumulated other comprehensive income (loss) by component for the years ended December 31, 2022, 2021 and 2020:

	Year Ended December 31,									
	2022				2021			2020		
	Postretirement Benefit	Available for Sale Securities	Cash Flow Hedge	Total	Available for Sale Securities	Cash Flow Hedge	Total	Available for Sale Securities	Cash Flow Hedge	Total
	(in thousands)									
Balance at beginning of period	$ —	$ (2,834)	$ 1,197	$ (1,637)	$ 3,198	$ (1,013)	$ 2,185	$ 1,480	$ —	$ 1,480
Other comprehensive (loss) income before reclassifications	251	(64,620)	7,815	(56,554)	(7,496)	2,557	(4,939)	4,214	(1,453)	2,761
Amounts reclassified to accumulated other comprehensive income for transfer of securities to available for sale	—	—	—	—	—	—	—	522	—	522
Amounts reclassified from accumulated other comprehensive income (loss)	(42)	—	(1,164)	(1,206)	(241)	513	272	(2,533)	46	(2,487)
Net current period other comprehensive (loss) income	209	(64,620)	6,651	(57,760)	(7,737)	3,070	(4,667)	2,203	(1,407)	796
Related tax effect	(59)	14,242	(1,868)	12,315	1,705	(860)	845	(485)	394	(91)
Balance at end of period	$ 150	$ (53,212)	$ 5,980	$ (47,082)	$ (2,834)	$ 1,197	$ (1,637)	$ 3,198	$ (1,013)	$ 2,185

19. FAIR VALUE OF ASSETS AND LIABILITIES

Fair value is the exchange price that would be received for an asset or paid to transfer a liability (exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. There are three levels of inputs that may be used to measure fair values:

- 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 – Significant other observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data.

- Level 3 – Significant unobservable inputs that reflect a company's own assumptions about the assumptions that market participants would use in pricing an asset or liability.

The following methods and assumptions were used by the Company in estimating fair value disclosures:

Debt Securities – Available-for-sale debt securities are recorded at fair value on a recurring basis. When available, the Company uses quoted market prices to determine the fair value of debt securities; such items are classified as Level 1. There were no Level 1 securities held at December 31, 2022 and 2021.

Level 2 debt securities are traded less frequently than exchange-traded instruments. The fair value of these securities is determined using matrix pricing with inputs that are observable in the market or can be derived principally from or corroborated by observable market data. This category includes obligations of GSEs, including mortgage-backed securities, individual name issuer trust preferred debt securities and corporate bonds.

Debt securities not actively traded whose fair value is determined through the use of cash flows utilizing inputs that are unobservable are classified as Level 3. There were no Level 3 securities held at December 31, 2022 and 2021.

FHLB stock - FHLB stock has restrictions placed on its transferability. As a result, the fair value of FHLB stock was not practicable to determine.

Loans held for sale - The fair value of mortgage loans held for sale is estimated based on current market prices for similar loans in the secondary market and therefore are classified as Level 2 assets. There were no mortgage loans held for sale 90 days or more past due as of December 31, 2022 and 2021.

Collateral Dependent Impaired Loans - The fair value of collateral-dependent loans that are deemed to be impaired is determined based upon the fair value of the underlying collateral. Such collateral primarily consists of real estate and, to a lesser extent, other business assets. For collateral-dependent loans for which repayment is dependent on the sale of the collateral, Management adjusts the fair value for estimated costs to sell. For collateral-dependent loans for which repayment is dependent on the operation of the collateral, such as accruing troubled debt restructured loans, estimated costs to sell are not incorporated into the measurement. Management may also adjust appraised values to reflect estimated market value declines or apply other discounts to appraised values resulting from its knowledge of the property. Internal valuations are utilized to determine the fair value of other business assets. Collateral-dependent impaired loans are categorized as Level 3.

Appraisals for collateral-dependent impaired loans are performed by certified general appraisers (for commercial properties) or certified residential appraisers (for residential properties) whose qualifications and licenses have been reviewed and verified by the Company. Once received, the Company reviews the assumptions and approaches utilized in the appraisal as well as the overall resulting fair value in comparison with independent data sources such as recent market data or industry-wide statistics.

Retirement plan annuities - The carrying value of the annuities are based on their contract values which approximate fair value.

MSRs - Fair value is based on a third-party valuation model that calculates the present value of estimated future net servicing income and includes observable market data such as prepayment speeds and default and loss rates.

Deposits and mortgagors' escrow accounts - The fair values disclosed for demand deposits (*e.g.*, interest and non-interest checking, passbook savings, and certain types of money market accounts) and mortgagors' escrow accounts are, by definition, equal to the amount payable on demand at the reporting date (*i.e.*, their carrying amounts). Fair values for certificates of deposit are estimated using a discounted cash flow calculation that applies market interest rates currently being offered on certificates to a schedule of aggregated expected monthly maturities on time deposits.

Borrowed funds - The fair values of borrowed funds are estimated using discounted cash flow analyses based on the current incremental borrowing rates in the market for similar types of borrowing arrangements.

Accrued interest - The carrying amounts of accrued interest approximate fair value.

Interest Rate Swap designated as a cashflow hedge – The Company works directly with a third-party vendor to provide periodic valuations for its interest rate risk management agreements to determine fair value of its interest rate swaps executed for interest rate risk management. The vendor utilizes standard valuation methodologies applicable to interest rate derivatives based on readily observable market data and are therefore considered Level 2 valuations.

Forward loan sale commitments and derivative loan commitments - Forward loan sale commitments and derivative loan commitments are based on fair values of the underlying mortgage loans and the probability of such commitments being exercised. The assumptions for pull-through rates are derived from internal data and adjusted using Management judgment. Derivative loan commitments include the value of servicing rights and non-refundable costs of originating the loan based on the Company's internal cost analysis that is not observable. The weighted average pull-through rate for derivative loan commitments was approximately 91% and 88% at December 31, 2022 and 2021, respectively.

Interest rate swaps and risk participation agreements - The Company's interest rate swaps are traded in over-the-counter markets where quoted market prices are not readily available. For these interest rate derivatives, fair value is determined by a third party utilizing models that use primarily market observable inputs, such as swap rates and yield curves. The pricing models used to value interest rate swaps calculate the sum of each instrument's fixed and variable cash flows, which are then discounted using an appropriate yield curve to arrive at the fair value of each swap. The pricing models do not contain a high level of subjectivity as the methodologies used do not require significant judgment.

Although the Company has determined that the majority of the inputs used to value its interest rate swaps and risk participation agreements fall within Level 2 of the fair value hierarchy, the credit valuation adjustments associated with interest rate contracts and risk participation agreements utilize Level 3 inputs, such as estimates of current credit spreads to evaluate the likelihood of default by the Company and its counterparties. As of December 31, 2022 and 2021, the Company assessed the significance of the impact of the credit valuation adjustments on the overall valuation of its derivative positions and determined that the credit valuation adjustments were not significant to the overall valuation of its derivatives. As a result, the Company classified its derivative valuations in their entirety as Level 2.

Off-balance sheet credit-related instruments - Fair values for off-balance sheet, credit-related financial instruments are based on fees currently charged to enter into similar agreements, taking into account the remaining terms of the agreements and the counterparties' credit standing. The fair value of off-balance sheet instruments is immaterial.

Transfers between levels are recognized at the end of the reporting period, if applicable. There were no transfers in the periods presented.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Assets and liabilities measured at fair value on a recurring basis are summarized below:

	Level 1	Level 2	Level 3	Total Fair Value
		(in thousands)		
December 31, 2022				
Assets				
Securities available for sale	$ —	$ 301,149	$ —	$ 301,149
Loans held for sale	—	18,544	—	18,544
Mortgage servicing rights	—	48,138	—	48,138
Derivative loan commitments	—	—	238	238
Forward loan sale commitments	—	—	249	249
Interest rate management agreements	—	8,314	—	8,314
Interest rate swaps	—	28,525	—	28,525
	$ —	$ 404,670	$ 487	$ 405,157
Liabilities				
Derivative loan commitments	$ —	$ —	$ 65	$ 65
Forward loan sale commitments	—	—	39	39
Interest rate swaps	—	28,525	—	28,525
	$ —	$ 28,525	$ 104	$ 28,629
December 31, 2021				
Assets				
Securities available for sale	$ —	$ 394,036	$ —	$ 394,036
Loans held for sale	—	45,642	—	45,642
Mortgage servicing rights	—	38,268	—	38,268
Derivative loan commitments	—	—	1,527	1,527
Forward loan sale commitments	—	—	56	56
Interest rate management agreements	—	1,663	—	1,663
Interest rate swaps	—	18,874	—	18,874
	$ —	$ 498,483	$ 1,583	$ 500,066
Liabilities				
Derivative loan commitments	$ —	$ —	$ 95	$ 95
Forward loan sale commitments	—	—	94	94
Interest rate swaps	—	19,214	—	19,214
	$ —	$ 19,214	$ 189	$ 19,403

The table below presents, for the years ended December 31, 2022, 2021 and 2020, the changes in Level 3 assets and liabilities that are measured at fair value on a recurring basis.

	Year Ended December 31,		
	2022	2021	2020
Assets: Derivative and Forward Loan Sale Commitments:			
Balance at beginning of period	$ 1,583	$ 12,623	$ 1,411
Total gains (losses) included in net income [1]	(1,096)	(11,040)	11,212
Balance at end of period	$ 487	$ 1,583	$ 12,623
Changes in unrealized gains relating to instruments at period end	$ 487	$ 1,583	$ 12,623

	Year Ended December 31,		
	2022	2021	2020
Liabilities: Derivative and Forward Loan Sale Commitments:			
Balance at beginning of period	$ (189)	$ (2,545)	$ (332)
Total gains (losses) included in net income [1]	85	2,356	(2,213)
Balance at end of period	$ (104)	$ (189)	$ (2,545)
Changes in unrealized losses relating to instruments at period end	$ (104)	$ (189)	$ (2,545)

[1] Included in mortgage banking income on the Consolidated Statements of Net Income.

Assets Measured at Fair Value on a Non-recurring Basis

The Company is required, on a non-recurring basis, to adjust the carrying value or provide valuation allowances for certain assets using fair value measurements in accordance with GAAP. The following is a summary of applicable non-recurring fair value measurements. There are no liabilities measured at fair value on a non-recurring basis.

	December 31,					
	2022			2021		
	Level 1	Level 2	Level 3	Level 1	Level 2	Level 3
	(in thousands)					
Collateral-dependent impaired loans	$ —	$ —	$ 349	$ —	$ —	$ 21,615
Other real estate owned and repossessed assets	—	—	—	—	—	53
	$ —	$ —	$ 349	$ —	$ —	$ 21,668

Losses in the following table represent the amount of the fair value adjustments recorded during the year on the carrying value of the assets held at December 31, 2022 and 2021, respectively. Losses on fully charged off loans are not included in the table.

	Year Ended December 31,	
	2022	2021
Collateral-dependent impaired loans	$ 8	$ 6,162

The table below presents quantitative information about significant unobservable inputs (Level 3) for assets measured at fair value on a nonrecurring basis at the dates indicated.

	Fair Value December 31,		Valuation Technique
	2022	2021	
	(in thousands)		
Collateral-dependent impaired loans	$ 349	$ 21,615	Sales Comparison Approach (1)

(1) Fair value is generally determined through independent appraisals of the underlying collateral. The Company may also use another source of collateral assessment to determine a reasonable estimate of the fair value of the collateral. Appraisals may be adjusted by Management for qualitative factors and estimated liquidation expenses. Unobservable inputs are adjustments for differences between the comparable sales. Residential real estate appraisals are generally discounted 0% - 20%. Commercial real estate loan appraisals are discounted 0% - 50%. Commercial and industrial appraisals are discounted 0-90%.

Summary of Fair Values of Financial Instruments

The estimated fair values, and related carrying or notional amounts, of the Company's financial instruments are as follows. Certain financial instruments and all nonfinancial instruments are exempt from disclosure requirements. Accordingly, the aggregate fair value amounts presented herein may not necessarily represent the underlying fair value of the Company.

	December 31, 2022				
	Carrying Amount	Fair Value			
		Level 1	Level 2	Level 3	Total
			(in thousands)		
Financial assets:					
Cash and cash equivalents	$ 98,017	$ 98,017	$ —	$ —	$ 98,017
Securities available for sale	301,149	—	301,149	—	301,149
Securities held to maturity	19,949	—	19,274	—	19,274
Federal Home Loan Bank stock	20,071	N/A	N/A	N/A	N/A
Loans held for sale	18,544	—	18,544	—	18,544
Loans, net	4,504,434	—	—	4,383,613	4,383,613
Retirement plan annuities	14,630	—	—	14,630	14,630
Accrued interest receivable	15,139	—	15,139	—	15,139
Financial liabilities:					
Deposits	4,189,499	—	—	4,166,796	4,166,796
Borrowed funds	400,675	—	399,655	—	399,655
Subordinated debt	34,285	—	—	28,221	28,221
Mortgagors' escrow accounts	9,537	—	—	9,537	9,537
Accrued interest payable	2,325	—	2,325	—	2,325
Derivative loan commitments:					
Assets	238	—	—	238	238
Liabilities	65	—	—	65	65
Interest rate management agreements:					
Assets	8,314	—	8,314	—	8,314
Liabilities	—	—	—	—	—
Interest rate swap agreements:					
Assets	28,525	—	28,525	—	28,525
Liabilities	28,525	—	28,525	—	28,525
Forward loan sale commitments:					
Assets	249	—	—	249	249
Liabilities	39	—	—	39	39

	December 31, 2021				
	Carrying	Fair Value			
	Amount	Level 1	Level 2	Level 3	Total
			(in thousands)		
Financial assets:					
Cash and cash equivalents	$ 194,719	$ 194,719	$ —	$ —	$ 194,719
Securities available for sale	394,036	—	394,036	—	394,036
Federal Home Loan Bank stock	5,931	N/A	N/A	N/A	N/A
Loans held for sale	45,642	—	45,642	—	45,642
Loans, net	3,562,356	—	—	3,558,934	3,558,934
Retirement plan annuities	14,174	—	—	14,174	14,174
Accrued interest receivable	10,624	—	10,624	—	10,624
Financial liabilities:					
Deposits	3,682,649	—	—	3,683,465	3,683,465
Borrowed funds	55,711	—	55,765	—	55,765
Subordinated debt	34,159	—	—	35,790	35,790
Mortgagors' escrow accounts	8,459	—	—	8,459	8,459
Accrued interest payable	1,083	—	1,083	—	1,083
Derivative loan commitments:					
Assets	1,527	—	—	1,527	1,527
Liabilities	95	—	—	95	95
Interest rate management agreements:					
Assets	1,663	—	1,663	—	1,663
Liabilities	—	—	—	—	—
Interest rate swap agreements:					
Assets	18,874	—	18,874	—	18,874
Liabilities	19,214	—	19,214	—	19,214
Forward loan sale commitments:					
Assets	56	—	—	56	56
Liabilities	94	—	—	94	94

20. EARNINGS PER SHARE ("EPS")

Basic EPS represents net income attributable to common shareholders divided by the weighted-average number of common shares outstanding during the period. Non-vested restricted shares that are participating securities are included in the computation of basic earnings per share. Diluted EPS is computed by dividing net income attributable to common shareholders by the weighted-average number of common shares outstanding, plus the effect of potential dilutive common stock equivalents outstanding during the period.

The following table presents earnings per common share.

	Year Ended December 31,		
	2022	2021	2020
Net income available to common stockholders (in thousands)	$ 45,589	$ 58,517	$ 44,792
Average number of common shares outstanding	50,293,762	54,454,113	58,252,140
Less: Average unallocated ESOP shares and non-vested restricted shares	(3,810,098)	(3,707,811)	(3,938,772)
Weighted average number of common shares outstanding used to calculate basic earnings per common share	46,483,664	50,746,302	54,313,368
Dilutive effect of share-based compensation	634,793	776,833	6,467
Weighted average number of common shares outstanding used to calculate diluted earnings per common share	47,118,457	51,523,135	54,319,835
Earnings per common share:			
Basic	$ 0.98	$ 1.15	$ 0.82
Diluted	$ 0.97	$ 1.14	$ 0.82

21. SEGMENT REPORTING

The reportable segments are determined by the products and services offered, primarily distinguished between banking and mortgage banking operations. They are also distinguished by the level of information provided to the chief operating decision maker, who uses such information to review performance of various components of the business. The Company has two reportable segments: HarborOne Bank and HarborOne Mortgage. Revenue from HarborOne Bank consists primarily of interest earned on loans and investment securities and service charges on deposit accounts. Revenue from HarborOne Mortgage comprises interest earned on loans and fees received as a result of the residential mortgage origination, sale and servicing process.

The accounting policies of the reportable segments are the same as those described in the summary of significant accounting policies. Segment profit and loss is measured by net income on a legal entity basis. Intercompany transactions are eliminated in consolidation.

Information about the reportable segments and reconciliation to the Consolidated Financial Statements at December 31, 2022, 2021 and 2020, and for the years then-ended are presented in the tables below.

	Year Ended December 31, 2022		
	HarborOne Bank	HarborOne Mortgage (in thousands)	Consolidated
Net interest and dividend income	$ 149,301	$ 1,617	$ 148,986
Provision for credit losses	5,660	—	5,660
Net interest and dividend income, after provision for credit losses	143,641	1,617	143,326
Mortgage banking income:			
Gain on sale of mortgage loans	—	15,970	15,970
Intersegment gain (loss)	(3,604)	3,185	—
Changes in mortgage servicing rights fair value	618	4,714	5,332
Other	873	9,075	9,948
Total mortgage banking income (loss)	(2,113)	32,944	31,250
Other noninterest income	25,930	129	26,059
Total noninterest income	23,817	33,073	57,309
Noninterest expense	110,407	27,065	138,906
Income before income taxes	57,051	7,625	61,729
Provision for income taxes	14,090	2,777	16,140
Net income	$ 42,961	$ 4,848	$ 45,589
Total assets at period end	$ 5,373,911	$ 124,229	$ 5,359,545
Goodwill at period end	$ 59,042	$ 10,760	$ 69,802

	Year Ended December 31, 2021		
	HarborOne Bank	HarborOne Mortgage (in thousands)	Consolidated
Net interest and dividend income	$ 129,785	$ 3,468	$ 131,370
Provision (benefit) for credit losses	(7,258)	—	(7,258)
Net interest and dividend income, after provision (benefit) for credit losses	137,043	3,468	138,628
Mortgage banking income:			
Gain on sale of mortgage loans	—	61,883	61,883
Intersegment gain (loss)	(3,665)	4,434	—
Changes in mortgage servicing rights fair value	(137)	(243)	(380)
Other	1,090	14,741	15,831
Total mortgage banking income (loss)	(2,712)	80,815	77,334
Other noninterest income	23,308	44	23,352
Total noninterest income	20,596	80,859	100,686
Noninterest expense	102,557	55,012	158,862
Income before income taxes	55,082	29,315	80,452
Provision for income taxes	14,933	7,569	21,935
Net income	$ 40,149	$ 21,746	$ 58,517
Total assets at period end	$ 4,481,509	$ 173,545	$ 4,553,405
Goodwill at period end	$ 59,042	$ 10,760	$ 69,802

	Year Ended December 31, 2020		
	HarborOne Bank	HarborOne Mortgage	Consolidated
		(in thousands)	
Net interest and dividend income	$ 118,217	$ 3,235	$ 120,066
Provision for credit losses	34,815	—	34,815
Net interest and dividend income, after provision for credit losses	83,402	3,235	85,251
Mortgage banking income:			
Gain on sale of mortgage loans	—	105,469	105,469
Intersegment gain (loss)	(3,148)	3,148	—
Changes in mortgage servicing rights fair value	(2,376)	(4,356)	(6,732)
Other	1,360	13,812	15,172
Total mortgage banking income (loss)	(4,164)	118,073	113,909
Other noninterest income (loss)	24,909	(138)	24,771
Total noninterest income	20,745	117,935	138,680
Noninterest expense	98,354	66,393	165,922
Income before income taxes	5,793	54,777	58,009
Provision for income taxes	527	12,964	13,217
Net income	$ 5,266	$ 41,813	$ 44,792
Total assets at period end	$ 4,460,164	$ 312,194	$ 4,483,615
Goodwill at period end	$ 59,042	$ 10,760	$ 69,802

22. CONDENSED FINANCIAL STATEMENTS OF PARENT COMPANY

Condensed financial information relative to HarborOne Bancorp, Inc.'s balance sheet at December 31, 2022 and 2021 and the related statements of net income and cash flows for the years ended December 31, 2022, 2021 and 2020 are presented below. The statement of stockholders' equity is not presented below, as the parent company's stockholders' equity is that of the consolidated company.

Balance Sheet	December 31,	
	2022	2021
	(in thousands)	
Assets		
Cash and due from banks	$ 77,014	$ 131,033
Investment in common stock of HarborOne Bank	549,888	555,695
Loan receivable - ESOP	29,242	30,740
Other assets	483	637
Total assets	$ 656,627	$ 718,105
Liabilities and Stockholders' Equity		
Subordinated debt	$ 34,285	$ 34,159
Other liabilities and accrued expenses	5,366	4,685
Stockholders' equity	616,976	679,261
Total liabilities and stockholders' equity	$ 656,627	$ 718,105

Statement of Net Income	Year Ended December 31, 2022	2021	2020
		(in thousands)	
Dividends from subsidiary	$ 13,000	$ 90,000	$ —
Interest from bank deposits	159	210	260
Interest on short-term investments	4	2	449
Interest on ESOP loan	999	1,046	1,596
Total income	14,162	91,258	2,305
Interest expense	2,095	2,095	2,095
Operating expenses	2,432	2,338	2,771
Total expenses	4,527	4,433	4,866
Income (loss) before income taxes and equity in undistributed net income (loss) of HarborOne Bank	9,635	86,825	(2,561)
Income tax benefit	(726)	(566)	(274)
Income (loss) before equity in income of subsidiaries	10,361	87,391	(2,287)
Equity in undistributed net income (loss) of HarborOne Bank	35,228	(28,874)	47,079
Net income	$ 45,589	$ 58,517	$ 44,792

Statement of Cash Flows	Year Ended December 31, 2022	2021	2020
		(in thousands)	
Cash flows from operating activities:			
Net income	$ 45,589	$ 58,517	$ 44,792
Adjustments to reconcile net income to net cash provided (used) by operating activities:			
Equity in undistributed net (income) loss of HarborOne Bank	(35,228)	28,874	(47,079)
Deferred income tax provision (benefit)	138	(8)	(18)
Share-based compensation	286	545	963
Net change in other assets	18	27	231
Net change in other liabilities	(97)	391	302
Net cash provided (used) by operating activities	10,706	88,346	(809)
Cash flows from investing activities:			
Repayment of ESOP loan	1,497	1,450	1,218
Advances to subsidiary	(999)	(1,046)	(1,884)
Repayment of advances to subsidiary	998	1,659	3,728
Net cash provided by investing activities	1,496	2,063	3,062
Cash flows from financing activities:			
Issuance of common stock	8,366	643	—
Repurchase of common stock	(62,525)	(69,215)	(15,923)
Amortization of subordinated debt issuance costs	126	126	126
Dividends paid	(12,188)	(9,195)	(3,258)
Net cash used by financing activities	(66,221)	(77,641)	(19,055)
Net change in cash and cash equivalents	(54,019)	12,768	(16,802)
Cash and cash equivalents at beginning of year	131,033	118,265	135,067
Cash and cash equivalents at end of year	$ 77,014	$ 131,033	$ 118,265

23. SELECTED QUARTERLY FINANCIAL DATA (UNAUDITED)

	First Quarter		Second Quarter		Third Quarter		Fourth Quarter	
	2022	2021	2022	2021	2022	2021	2022	2021
	(in thousands, except share data)							
Interest and dividend income	$ 35,602	$ 35,847	$ 39,857	$ 35,887	$ 44,556	$ 35,808	$ 51,915	$ 36,353
Interest expense	2,332	3,795	2,662	3,357	5,224	3,005	12,726	2,368
Net interest and dividend income	33,270	32,052	37,195	32,530	39,332	32,803	39,189	33,985
Provision for credit losses	338	91	2,546	(4,286)	668	(1,627)	2,108	(1,436)
Other noninterest income	19,061	37,809	14,103	21,703	14,245	21,769	9,900	19,164
Realized securities gains and impairment losses, net	—	—	—	—	—	241	—	—
Total noninterest income	19,061	37,809	14,103	21,703	14,245	22,010	9,900	19,164
Total noninterest expenses	34,835	42,802	34,954	38,598	34,473	39,274	34,644	38,188
Provision for income taxes	4,891	7,576	3,811	5,645	4,678	4,907	2,760	3,807
Net income	$ 12,267	$ 19,392	$ 9,987	$ 14,276	$ 13,758	$ 12,259	$ 9,577	$ 12,590
Basic earnings per share	$ 0.26	$ 0.37	$ 0.21	$ 0.28	$ 0.30	$ 0.25	$ 0.21	$ 0.26
Diluted earnings per share	$ 0.25	$ 0.37	$ 0.21	$ 0.27	$ 0.30	$ 0.24	$ 0.21	$ 0.25
Weighted average common shares, basic	47,836,410	52,537,409	46,980,830	51,778,293	45,830,737	49,801,123	45,321,491	48,918,539
Weighted average common shares, diluted	48,690,420	53,000,830	47,536,033	52,650,071	46,420,527	50,663,415	45,861,658	49,828,379

24. REVENUE RECOGNITION

Revenue from contracts with customers in the scope of ASC 606 is measured based on the consideration specified in the contract with a customer and excludes amounts collected on behalf of third parties. The Company recognizes revenue from contracts with customers when it satisfies its performance obligations.

The Company's performance obligations are generally satisfied as services are rendered and can either be satisfied at a point in time or over time. Unsatisfied performance obligations at the report date are not material to our consolidated financial statements.

In certain cases, other parties are involved with providing services to our customers. If the Company is a principal in the transaction (providing services itself or through a third party on its behalf), revenues are reported based on the gross consideration received from the customer and any related expenses are reported gross in noninterest expense. If the Company is an agent in the transaction (referring to another party to provide services), the Company reports its net fee or commission retained as revenue.

The Company recognizes revenue that is transactional in nature and such revenue is earned at a point in time. Revenue that is recognized at a point in time includes card interchange fees (fee income related to debit card transactions), ATM fees, wire transfer fees, overdraft charge fees, and stop-payment and returned check fees. Additionally, revenue is collected from loan fees, such as letters of credit, line renewal fees and application fees. Such revenue is derived from transactional information and is recognized as revenue immediately as the transactions occur or upon providing the service to complete the customer's transaction.

ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURES

None.

ITEM 9A. CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

As required by Rule 13a-15 under the Exchange Act, as amended (the "Exchange Act"), the Company carried out an evaluation under the supervision and with the participation of Management, including the Company's Chief Executive Officer and Chief Financial Officer, of the Company's disclosure controls and procedures as of the end of the period ended December 31, 2022. Based upon that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures are effective and designed to ensure that information required to be disclosed by the Company in the reports it files or submits under the Exchange Act is (i) recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms and (ii) accumulated and communicated to Management, including its Chief Executive Officer and Chief Financial Officer, as appropriate to allow timely decisions regarding required disclosure. The Company will continue to review and document its disclosure controls and procedures and consider such changes in future evaluations of the effectiveness of such controls and procedures, as it deems appropriate.

Management's Report on Internal Controls Over Financial Reporting.

Management is responsible for establishing and maintaining adequate internal control over financial reporting as such term is defined in Exchange Act Rule 13a-15(f). The Company's internal control system was designed to provide reasonable assurance to its Management and the Board of Directors regarding the preparation and fair presentation of published financial statements.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation. As of December 31,2022, Management assessed the effectiveness of its internal control over financial reporting using the criteria described in *Internal Control-Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO"). Based on our assessment and those criteria, Management believes that the Company maintained effective internal control over financial reporting as of December 31, 2022. In addition, the effectiveness of the Company's internal control over financial reporting as of December 31, 2022 has been audited by Crowe LLP, an independent registered public accounting firm. The report concerning the effectiveness of the Company's internal control over financial reporting as of December 31, 2022 issued by Crowe LLP, appears in Item 8 of this Annual Report on Form 10-K.

There has been no change in our internal controls over financial reporting during the fourth quarter ended December 31, 2022 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

ITEM 9B. OTHER INFORMATION

None.

PART III

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

The information required herein is incorporated by reference from the Company’s proxy statement relating to its May 17, 2023 Annual Meeting of Shareholders (the “Definitive Proxy Statement”) that will be filed with the SEC within 120 days following the fiscal year end December 31, 2022 under the headings of “Board of Director Information,” “Executive Officer Information,” and “Section 16(a) Beneficial Ownership Reporting Compliance.”

ITEM 11. EXECUTIVE COMPENSATION

The information required herein is incorporated by reference from the Definitive Proxy Statement under the headings of “Director Compensation,” “Executive Compensations,” and “Compensation Committee Interlocks and Insider Participation.”

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Securities Authorized for Issuance Under Equity Compensation Plans

The following table sets forth information as of December 31, 2022 about the securities authorized for issuance under the Equity Plans. The Company’s shareholders previously approved the plans and all amendments are subject to shareholder approval. The Company has no other equity compensation plans that have not been approved by shareholders.

	Number of Securities to Be Issued Upon Exercise of Outstanding Options, Warrants, and Rights (a)	Weighted Average Exercise Price of Outstanding Options, Warrants and Rights (b)	Number of Securities Remaining Available for Future Issuance (Excluding Securities in Column (a)) (c)
Equity compensation plans approved by shareholders [1]	1,174,755	$ 10.02	$ 3,712,744 [2]
Equity compensation plans not approved by shareholders	—	—	—
Total	1,174,755	$ 10.02	$ 3,712,744

[1] Consists of the Company's 2017 Stock Option and Incentive Plan and the 2020 Equity Incentive Plan. For additional information, see Note 16 to the Consolidated Financial Statements.
[2] Shares available for issuance under the 2020 Equity Plan. The Company will only award shares under the 2020 Equity Plan.

The information required herein by Item 403 of Regulation S-K regarding the security ownership of Management and certain beneficial owners is incorporated by reference from the Definitive Proxy Statement under the heading “Stock Ownership and Other Matters.”

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required herein is incorporated by reference from the Definitive Proxy Statement under the heading “Board of Director Information-Related Party Transactions” and “Board of Director Information-Director Independence.”

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required herein is incorporated by reference from the Definitive Proxy Statement under the heading “Proposals to be Voted upon at the Annual Meeting – Ratification of Appointment of Independent Registered Public Accounting Firm (Proposal 2).”

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

EXHIBIT INDEX

The following exhibits are included in this Annual Report on Form 10-K for the year ended December 31, 2022 (and are numbered in accordance with Item 601 of Regulation S-K):

Exhibit No.	Description
2.1	Plan of Conversion (*incorporated by reference to Exhibit 2.1 to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 11, 2019*)
3.1	Articles of Organization of HarborOne Bancorp, Inc. (*incorporated by reference to Exhibit 3.1 to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 11, 2019*)
3.2	By-Laws of HarborOne Bancorp, Inc. (*incorporated by reference to Exhibit 3.2 to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 11, 2019*)
4.1	Form of Common Stock Certificate of HarborOne Bancorp, Inc. (*incorporated by reference to Exhibit 4.1 to the Registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 11, 2019*)
4.2	Indenture, dated August 30, 2018 by and between HarborOne Bancorp, Inc. and UMB Bank, N.A., as trustee (*incorporated by reference to Exhibit 4.1 to Form 8-K filed with the Securities and Exchange Commission on August 30, 2018*)
4.3	Form of 5.625% Fixed to Floating Rate Subordinated Note due 2028 (*incorporated by reference to Exhibit 4.2 to Form 8-K filed with the Securities and Exchange Commission on August 30, 2018)*
4.4	Description of Registrant's Securities *(incorporated by reference to Exhibit 4.4 to Form 10-K filed with the Securities and Exchange Commission on March 13, 2020)*
10.1+	HarborOne Bank Employee Stock Ownership Plan (*incorporated by reference to Exhibit 10.1 to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 4, 2016*)
10.2+	HarborOne ESOP Restoration Plan (*incorporated by reference to Exhibit 10.2 to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 4, 2016*)
10.3+	HarborOne Senior Management Long Term Incentive Plan (*incorporated by reference to Exhibit 10.3 to the Registrant's Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 4, 2016*)
10.4+	Amended and Restated Employment Agreement, dated as of March 1, 2016, by and among HarborOne Bancorp, Inc., HarborOne Bank and James W. Blake *(incorporated by reference to Exhibit 10.4 to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 4, 2016) †*
10.5+	Amended and Restated Employment Agreement, dated as of March 1, 2016, by and among HarborOne Bancorp, Inc., HarborOne Bank and Joseph Casey *(incorporated by reference to Exhibit 10.7 to HarborOne Bancorp, Inc.'s Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 4, 2016)†*
10.6+	2016 Supplemental Executive Retirement Plan, dated as of January 21, 2016, by and between HarborOne Bank and James W. Blake *(incorporated by reference to Exhibit 10.5 to HarborOne Bancorp, Inc.'s Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 4, 2016)†*
10.7+	Amended and Restated Supplemental Executive Retirement Plan Agreement, dated as of March 1, 2016, by and between HarborOne Bank and Joseph F. Casey *(incorporated by reference to Exhibit 10.8 to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 4, 2016) †*
10.8+	Endorsement Split Dollar Life Insurance Agreement, dated as of November 13, 2015, by and between HarborOne Bank and James Blake *(incorporated by reference to Exhibit 10.6 to HarborOne Bancorp, Inc.'s Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 4, 2016)†*

10.9+	HarborOne Bancorp, Inc. 2017 Stock Option and Incentive Plan (*incorporated herein by reference to the Company's Form 8-K filed with the Securities and Exchange Commission on August 10, 2017*)
10.10+	Form of Restricted Stock Award Agreement Under the HarborOne Bancorp, Inc. 2017 Stock Option and Incentive Plan (*incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 11, 2017*)
10.11+	Form of Non-Qualified Stock Option Agreement for Non-Employee Directors Under the HarborOne Bancorp, Inc. 2017 Stock Option and Incentive Plan (*incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 11, 2017*)
10.12+	Form of Non-Qualified Stock Option Agreement for Employees Under the HarborOne Bancorp, Inc. 2017 Stock Option and Incentive Plan (*incorporated by reference to Exhibit 10.4 to Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 11, 2017*)
10.13+	Form of Incentive Stock Option Agreement Under the HarborOne Bancorp, Inc. 2017 Stock Option and Incentive Plan (*incorporated by reference to Exhibit 10.5 to Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission on August 11, 2017*)
10.14+	Form of Change in Control Agreement (*incorporated by reference to Exhibit 10.9 to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 4, 2016*)
10.15+	HarborOne Bank Director Retirement Plan (*incorporated by reference to Exhibit 10.10 to the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on March 4, 2016*)
10.16+	First Amendment to Director Retirement Plan (*incorporated by reference to Exhibit 10.11 to Amendment No.1 of the Registration Statement on Form S-1 filed with the Securities and Exchange Commission on April 8, 2016)*
10.17	Form of Subordinated Note Purchase Agreement, dated August 30, 2018, by and among HarborOne Bancorp, Inc. and the Purchasers (*incorporated by reference to Exhibit 10.1 to Form 8-K filed with the Securities and Exchange Commission on August 30, 2018*)
10.18	Form of Registration Rights Agreement, dated August 30, 2018, by and among HarborOne Bancorp, Inc. and the Purchasers (*incorporated by reference to Exhibit 10.2 to Form 8-K filed with the Securities and Exchange Commission on August 30, 2018*)
10.19+	HarborOne Bancorp, Inc. 2020 Equity Incentive Plan *(incorporated by reference to Exhibit 10.1 to Form 8-K filed with the Securities and Exchange Commission on October 1, 2020)*
10.20	Form of Indemnification Agreement *(incorporated by reference to Exhibit 10.2 to Form 10-Q filed with the Securities and Exchange Commission on November 6, 2020)*
10.21+	Form of Restricted Stock Award Agreement under the HarborOne Bancorp, Inc. 2020 Equity Incentive Plan *(incorporated by reference to Exhibit 10.2 to Form S-8 filed with the Securities and Exchange Commission on October 5, 2020)*
10.22+	Form of Non-Qualified Stock Option Award Agreement for Non-Employee Directors under the HarborOne Bancorp, Inc. 2020 Equity Incentive Plan *(incorporated by reference to Exhibit 10.3 to Form S-8 filed with the Securities and Exchange Commission on October 5, 2020)*
10.23+	Form of Non-Qualified Stock Option Award Agreement for Employees under the HarborOne Bancorp, Inc. 2020 Equity Incentive Plan *(incorporated by reference to Exhibit 10.4 to Form S-8 filed with the Securities and Exchange Commission on October 5, 2020)*
10.24+	Form of Incentive Stock Option Agreement under the HarborOne Bancorp, Inc. 2020 Equity Incentive Plan *(incorporated by reference to Exhibit 10.5 to Form S-8 filed with the Securities and Exchange Commission on October 5, 2020)*
10.25+	Form of Restricted Stock Unit Award Agreement for Non-Employee Directors under the HarborOne Bancorp, Inc. 2020 Equity Incentive Plan *(incorporated by reference to Exhibit 10.6 to Form S-8 filed with the Securities and Exchange Commission on October 5, 2020)*
10.26+	Form of Restricted Stock Unit Award Agreement for Employees under the HarborOne Bancorp, Inc. 2020 Equity Incentive Plan *(incorporated by reference to Exhibit 10.7 to Form S-8 filed with the Securities and Exchange Commission on October 5, 2020)*

10.27+	Form of Performance Restricted Stock Unit Award Agreement for Employees under the HarborOne Bancorp, Inc. 2020 Equity Incentive Plan *(incorporated by reference to Exhibit 10.27 to Form 10-K filed with the Securities and Exchange Commission on March 12, 2021)*
10.28+	Change in Control Agreement dated March 9, 2022 between HarborOne Bancorp, Inc. and Linda H. Simmons *(incorporated by reference to Exhibit 10.28 to Form 10-K filed with the Securities and Exchange Commission on March 11, 2022)*
10.29+	Change in Control Agreement dated March 9, 2022 between HarborOne Bancorp, Inc. and H. Scott Sanborn *(incorporated by reference to Exhibit 10.29 to Form 10-K filed with the Securities and Exchange Commission on March 11, 2022)*
10.30+	First Amendment to the Amended and Restated Supplemental Executive Retirement Plan Agreement, dated as of February 25, 2016, by and between HarborOne Bank and Joseph F. Casey *(incorporated by reference to Exhibit 10.1 to the Form 8-K filed with the Securities and Exchange Commission on April 29, 2022)*
21*	Subsidiaries of the Registrant
23.1*	Consent of Crowe LLP
31.1*	Certification of Chief Executive Officer Required by Rule 13a-14(a) and Rule 15d-14(a) of the Exchange Act
31.2*	Certification of Chief Financial Officer Required by Rule 13a-14(a) and Rule 15d-14(a) of the Exchange Act
32.1**	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2**	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101	Interactive data files pursuant to Rule 405 of Regulation S-T: (i) the Consolidated Balance Sheets as of December 31, 2022 and 2021, (ii) the Consolidated Statements of Income for the years ended December 31, 2022 and 2021, (iii) the Consolidated Statements of Comprehensive Income for the years ended December 31, 2022 and 2021, (iv) the Consolidated Statements of Changes in Stockholders' Equity for the years ended December 31, 2022 and 2021, (v) the Consolidated Statements of Cash Flows for the years ended December 31, 2022 and 2021, and (vi) the Notes to the Consolidated Financial Statements.
104	Cover Page Interactive Data File (formatted in Inline XBRL and included in Exhibit 101)

* Filed herewith
** Furnished herewith
\+ Management contract or compensatory plan or agreement

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

HarborOne Bancorp, Inc.

Date:	March 9, 2023	By:	/s/ Joseph F. Casey Joseph F. Casey *President and Chief Executive Officer* *(Principal Executive Officer)* Date: March 9, 2023

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the Registrant and in the capacities and on the dates indicated.

By:	/s/ Joseph F. Casey Joseph F. Casey *President, Chief Executive Officer and Director* *(Principal Executive Officer)* Date: March 9, 2023	By:	/s/ Linda H. Simmons Linda H. Simmons *Executive Vice President and Chief Financial Officer* *(Principal Accounting and Financial Officer)* Date: March 9, 2023
By:	/s/ Joseph F. Barry Joseph F. Barry, *Director* Date: March 9, 2023	By:	/s/ Timothy R. Lynch Timothy R. Lynch, *Director* Date: March 9, 2023
By:	/s/ Mandy Lee Berman Mandy Lee Berman, *Director* Date: March 9, 2023	By:	/s/ Anne Margulies Anne Margulies *Director* Date: March 9, 2023
By:	/s/ James W. Blake James W. Blake *Director* Date: March 9, 2023	By:	/s/ William A. Payne William A. Payne, *Director* Date: March 9, 2023
By:	/s/ David P. Frenette, Esq. David P. Frenette, Esq., *Director* Date: March 9, 2023	By:	/s/ Andreana Santangelo Andreana Santangelo *Director* Date: March 9, 2023
By:	/s/ Gordon Jezard Gordon Jezard, *Director* Date: March 9, 2023	By:	/s/ Michael J. Sullivan, Esq. Michael J. Sullivan, Esq. *Chairman and Director* Date: March 9, 2023
By:	/s/ Barry R. Koretz Barry R. Koretz, *Director* Date: March 9, 2023	By:	/s/ Damian W. Wilmot, Esq. Damian W. Wilmot, Esq. *Director* Date: March 9, 2023

Exhibit 21

Subsidiaries of Registrant

Subsidiary Name	**State of Incorporation or Organization**
HarborOne Bank	MA
Legion Parkway Company LLC	MA

Subsidiaries of the Bank

Subsidiary Name	**State of Incorporation or Organization**
HarborOne Mortgage, LLC	MA
HarborOne Security Corporation, LLC	MA
Rhode Island Passive Investment Corp.	RI

Exhibit 23.1

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-233292 and 333-249324 on Form S-8 of HarborOne Bancorp, Inc. of our report dated March 9, 2023 relating to the financial statements and effectiveness of internal control over financial reporting, appearing in this Annual Report on Form 10-K.

Crowe LLP

Crowe LLP

Livingston, New Jersey
March 9, 2023

Exhibit 31.1

CERTIFICATION PURSUANT TO
EXCHANGE ACT RULE 13a-14(a) AND RULE 15d-14(a)

I, Joseph F. Casey, certify that:

1. I have reviewed this Annual Report on Form 10-K of HarborOne Bancorp, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 9, 2023

By: /s/Joseph F. Casey
Joseph F. Casey
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION PURSUANT TO
EXCHANGE ACT RULE 13a-14(a) AND RULE 15d-14(a)

I, Linda H. Simmons, certify that:

1. I have reviewed this Annual Report on Form 10-K of HarborOne Bancorp, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 9, 2023

By: /s/ Linda H. Simmons
Linda H. Simmons
Executive Vice President and Chief Financial Officer
(Principal Accounting and Financial Officer)

Exhibit 32.1

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of HarborOne Bancorp, Inc. (the "Company") for the year ended December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Joseph F. Casey, President, Chief Executive Officer and Director of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge: (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Joseph F. Casey

Joseph F. Casey
President, Chief Executive Officer and Director

Date: March 9, 2023

Exhibit 32.2

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO SECTION 906
OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K of HarborOne Bancorp, Inc. (the "Company") for the year ended December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Linda H. Simmons, Executive Vice President and Chief Financial Officer, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge: (1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, and (2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Linda H. Simmons
Linda H. Simmons
Executive Vice President and Chief Financial Officer

Date: March 9, 2023