# UNITED STATES <br> SECURITIES AND EXCHANGE COMMISSION 

Washington, D.C. 20549
FORM 10-K

| (Mark One) |  |
| :---: | :---: |
| x | ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF |
|  | THE SECURITIES EXCHANGE ACT OF 1934 |
| 0 | For the fiscal year ended December 31, 2018 |
| OR |  |
|  | TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF |
|  | THE SECURITIES EXCHANGE ACT OF 1934 |
|  | for the transition period from |
|  | Commission File Number 1-6887 |
|  | BANK OF HAWAII CORPORATION |
|  | (Exact name of registrant as specified in its charter) |

(State of incorporation)
(I.R.S. Employer Identification No.)

130 Merchant Street, Honolulu, Hawaii
(Address of principal executive offices)
96813
(Zip Code)
1-888-643-3888
(Registrant's telephone number, including area code)
Securities registered pursuant to Section 12(b) of the Act:

Name of Each Exchange on Which Registered

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 $x$ No o
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 o No $x$
 that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes $x$ No o
 Regulation S-T (Section 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o
 knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. o
 filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

| Large accelerated filer x | Accelerated filer o |
| :--- | :--- | :--- |

Non-accelerated filer o (Do not check if a smaller reporting company) Smaller reporting company o

Emerging growth company o
 13(a) of the Exchange Act.
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Act).
Yes o No x

 on that date.

As of February 15, 2019, there were 41,212,202 shares of common stock outstanding
DOCUMENTS INCORPORATED BY REFERENCE
Portions of the Proxy Statement relating to the 2019 Annual Meeting of Shareholders to be held on April 26, 2019, are incorporated by reference into Part III of this Report.

## Bank of Hawaii Corporation <br> 2018 Form 10-K Annual Report <br> Table of Contents

|  | Item Number |  | Page |
| :---: | :---: | :---: | :---: |
| Part I | Item 1. | Business | $\underline{2}$ |
|  | Item 1A. | Risk Factors | 8 |
|  | Item 1B. | Unresolved Staff Comments | 15 |
|  | Item 2. | Properties | $\underline{15}$ |
|  | Item 3. | Legal Proceedings | $\underline{15}$ |
|  | Item 4. | Mine Safety Disclosures | $\underline{15}$ |
| Part II | Item 5. | Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities | 16 |
|  | Item 6. | Selected Financial Data | 18 |
|  | Item 7. | Management's Discussion and Analysis of Financial Condition and Results of Operations | $\underline{20}$ |
|  | Item 7A. | Quantitative and Qualitative Disclosures About Market Risk | 58 |
|  | Item 8. | Financial Statements and Supplementary Data | $\underline{59}$ |
|  | Item 9. | Changes in and Disagreements With Accountants on Accounting and Financial Disclosure | 130 |
|  | Item 9A. | Controls and Procedures | $\underline{130}$ |
|  | Item 9B. | Other Information | $\underline{132}$ |
| Part III | Item 10. | Directors, Executive Officers and Corporate Governance | $\underline{132}$ |
|  | Item 11. | Executive Compensation | 132 |
|  | $\text { Item } 12 .$ | Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters | 132 |
|  | Item 13. | Certain Relationships and Related Transactions, and Director Independence | $\underline{132}$ |
|  | Item 14. | Principal Accounting Fees and Services | $\underline{132}$ |
| Part IV | Item 15. | Exhibits, Financial Statement Schedules | $\underline{133}$ |
| Signatures |  |  | $\underline{137}$ |

## Item 1. Business

## General

Bank of Hawaii Corporation (the "Parent") is a Delaware corporation and a bank holding company ("BHC") headquartered in Honolulu, Hawaii. The Parent's principal operating subsidiary, Bank of Hawaii (the "Bank"), was organized on December 17, 1897 and is chartered by the State of Hawaii. The Bank's deposits are insured by the Federal Deposit Insurance Corporation (the "FDIC") and the Bank is a member of the Federal Reserve System.

The Bank, directly and through its subsidiaries, provides a broad range of financial products and services primarily to customers in Hawaii, Guam, and other Pacific Islands. References to "we," "our," "us," or "the Company" refer to the Parent and its subsidiaries and are consolidated for financial reporting purposes. The Bank's subsidiaries include Bank of Hawaii Leasing, Inc., Bankoh Investment Services, Inc., and Pacific Century Life Insurance Corporation. The Bank's subsidiaries are engaged in equipment leasing, securities brokerage, investment advisory services, and providing credit insurance.

We are organized into four business segments for management reporting purposes: Retail Banking, Commercial Banking, Investment Services and Private Banking, and Treasury and Other. See Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD\&A") and Note 13 to the Consolidated Financial Statements for more information.

Our annual report on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and all amendments to those reports can be found free of charge on our website at www.boh.com as soon as reasonably practicable after such material is electronically filed with or furnished to the U.S. Securities and Exchange Commission (the "SEC"). The SEC maintains a website, www.sec.gov, which contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC. Our Corporate Governance Guidelines; charters of the Audit and Risk Committee, the Human Resources and Compensation Committee, and the Nominating and Corporate Governance Committee; and our Code of Business Conduct and Ethics are available on our website at www.boh.com. Printed copies of this information may be obtained, without charge, by written request to the Corporate Secretary at 130 Merchant Street, Honolulu, Hawaii, 96813.

## Competition

The Company operates in a highly competitive environment subject to intense competition from traditional financial service providers including banks, savings associations, credit unions, mortgage companies, finance companies, mutual funds, brokerage firms, insurance companies, and other non-traditional providers of financial services including financial service subsidiaries of commercial and manufacturing companies. Some of our competitors are not subject to the same level of regulation and oversight that is required of banks and BHCs, and receive favorable tax treatment. As a result, some of our competitors may have lower cost structures. Also, some of our competitors, through delivery channels such as the Internet, may be based outside of the markets that we serve. By emphasizing our extensive branch network, exceptional service levels, and knowledge of local trends and conditions, the Company has developed an effective competitive advantage in its market.

## Supervision and Regulation

Our operations are subject to extensive regulation by federal and state governmental authorities. The regulations are primarily intended to protect depositors, customers, and the integrity of the U.S. banking system and capital markets. The following information describes some of the more significant laws and regulations applicable to us. The descriptions below are qualified in their entirety by reference to the applicable laws and regulations. Proposals to change the laws and regulations governing the banking industry are frequently raised in Congress, in state legislatures, and with the various bank regulatory agencies. Changes in applicable laws or regulations, or a change in the way such laws or regulations are interpreted by regulatory agencies or courts, may have a material impact on our business, operations, and earnings.

## The Parent

The Parent is registered as a BHC under the Bank Holding Company Act of 1956, as amended (the "BHC Act"), and is subject to the supervision of and to examination by the Board of Governors of the Federal Reserve (the "FRB"). The Parent is also registered as a financial institution holding company under the Hawaii Code of Financial Institutions (the "Code") and is subject to the registration, reporting, and examination requirements of the Code.

The BHC Act prohibits, with certain exceptions, a BHC from acquiring direct or indirect beneficial ownership or control of either a company that is not a bank, or more than $5 \%$ of the voting shares of any bank, without the FRB's prior approval. A BHC is generally prohibited from engaging in any activity other than banking, managing or controlling banks or other subsidiaries authorized under the BHC Act, or an activity that the FRB has determined to be so closely related to those activities as to be a proper incident to one of them.

Under FRB policy, a BHC is expected to serve as a source of financial and management strength to its subsidiary bank. A BHC is also expected to commit resources to support its subsidiary bank in circumstances where it might not do so absent such a policy. Under this policy, a BHC is expected to maintain reliable funding and contingency plans to stand ready to provide adequate capital funds to its subsidiary bank during periods of financial adversity and to maintain the financial flexibility and capital-raising capacity to obtain additional resources for assisting its subsidiary bank.

Under the Riegle-Neal Interstate Banking and Branching Efficiency Act of 1994 (the "Riegle-Neal Act") banks and BHCs from any state are permitted to acquire banks located in any other state, subject to certain conditions, including certain nationwide and state-imposed deposit concentration limits. Banks also have the ability, subject to certain restrictions, to acquire branches outside their home states by acquisition or merger. The establishment of new interstate branches is also possible in those states with laws that expressly permit de novo branching. Because the Code permits de novo branching by out-of-state banks, those banks may establish new branches in Hawaii.

## Bank of Hawaii

The Bank is subject to extensive federal, state, territorial and foreign regulations that significantly affect its business and activities. The Bank is subject to supervision and examination by the FRB of San Francisco, the Consumer Financial Protection Bureau (the "CFPB"), and the State of Hawaii Department of Commerce and Consumer Affairs' ("DCCA") Division of Financial Institutions. These regulatory bodies have broad authority to implement standards and to initiate proceedings designed to prohibit depository institutions from engaging in activities that may represent "unsafe" or "unsound" banking practices or constitute violations of applicable laws, rules, regulations, administrative orders, or written agreements with regulators. The standards relate generally to operations and management, asset quality, interest rate exposure, capital, executive compensation, and consumer protection. The regulatory bodies are authorized to take action against institutions that fail to meet such standards, including the assessment of civil monetary penalties and restitution, the issuance of cease-and-desist orders, and other actions, up to and including revocation of a bank's charter for the most severe infractions, or putting such a bank into receivership if it is not financially viable.

Bankoh Investment Services, Inc., the broker-dealer and investment adviser subsidiary of the Bank, is incorporated in Hawaii and is regulated by the SEC, the Financial Industry Regulatory Authority, and the DCCA's Insurance Division. Pacific Century Life Insurance Corporation is incorporated in Arizona and is primarily regulated by the State of Arizona Department of Insurance.

## The Dodd Frank Act

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") and its regulations implemented sweeping changes to the financial regulatory landscape aimed at strengthening the sound operation of the financial services sector by mandating higher capital and liquidity requirements, establishing new standards for mortgage lenders, increasing regulation of executive and incentive-based compensation and numerous other provisions. Provisions also limit or place significant burdens and costs on activities traditionally conducted by banking organizations, such as arranging and participating in swap and derivative transactions, proprietary trading and investing in private equity and other funds.

Several provisions of the Dodd-Frank Act were significantly changed by enactment of the Economic Growth, Regulatory Relief, and Consumer Protection Act in May 2018, notably by eliminating the requirement for institutions like the Company to perform and publicly disclose periodic stress tests. The Company continues to monitor and implement rules, regulations, and interpretations of the Dodd-Frank Act as they are adopted and modified, and to evaluate their application to our current and future operations.

## Capital Requirements

In July, 2013, the FRB, the Office of the Comptroller of the Currency (the "OCC") and the FDIC adopted new capital rules (the "Rules"). These Rules were designed to help ensure that banks maintain strong capital positions by increasing both the quantity and quality of capital held by U.S. banking organizations. The Rules reflect, in part, certain standards initially adopted by the Basel Committee on Banking Supervision in December 2010 (which are commonly called "Basel III" standards) as well as requirements by the Dodd-Frank Act.

The Federal Deposit Insurance Corporation Improvement Act of 1991 ("FDICIA") identifies five capital categories for insured depository institutions: "well capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized," and "critically undercapitalized."

The federal banking agencies are authorized by FDICIA to impose progressively more restrictive constraints on operations, management and capital distributions, depending on the capital category in which an institution is classified. These "prompt corrective actions" can include: requiring an insured depository institution to adopt a capital restoration plan guaranteed by the institution's parent company; placing limits on asset growth and restrictions on activities, including restrictions on transactions with affiliates; restricting the interest rates the institution may pay on deposits; prohibiting the payment of principal or interest on subordinated debt; prohibiting the holding company from making capital distribution without prior regulatory approval; and ultimately appointing a receiver for the institution.

A "well capitalized" institution must have a Common Equity Tier 1 Capital Ratio of at least $6.5 \%$, a Tier 1 Capital Ratio of at least 8\%, a Total Capital Ratio of at least $10 \%$, a Tier 1 Leverage Ratio of at least $5 \%$, and not be subject to a capital directive order. As of December 31, 2018, the Bank was classified as "well capitalized." The classification of a depository institution under one of the categories set out above is primarily for the purpose of applying the prompt corrective action, and is not intended to be, nor should it be interpreted as, a representation of the overall financial condition or the prospects of that financial institution. See Note 11 to the Consolidated Financial Statements for more information.

## Dividend Restrictions

The Parent is a legal entity separate and distinct from the Bank. The Parent's principal source of funds to pay dividends on its common stock and to service its debt is dividends from the Bank. Various federal and state laws and regulations limit the amount of dividends the Bank may pay to the Parent without regulatory approval. The FRB is authorized to determine the circumstances when the payment of dividends would be an unsafe or unsound practice and to prohibit such payments. The right of the Parent, its shareholders, and creditors to participate in any distribution of the assets or earnings of its subsidiaries is also subject to the prior claims of creditors of those subsidiaries. For information regarding the limitations on the Bank's ability to pay dividends to the Parent, see Note 11 to the Consolidated Financial Statements.

## Transactions with Affiliates and Insiders

Transactions between the Bank and any affiliate are governed by Sections 23A and 23B of the Federal Reserve Act. An affiliate of the Bank is any company or entity which controls, is controlled by or is under common control with the Bank which is not a subsidiary of the Bank. Under federal law, the Bank is subject to restrictions that limit the transfer of funds or other items of value to the Parent, and any other non-bank affiliates in "covered transactions." In general, covered transactions include making loans to an affiliate, the purchase of or investment in the securities issued by an affiliate, the purchase of assets from an affiliate, the acceptance of securities issued by an affiliate as collateral security for a loan or extensions of credit to any person or company, the issuance of a guarantee, acceptance or letter of credit on behalf of an affiliate, or certain transactions with an affiliate that involve the borrowing or lending of securities and certain derivative transactions with an affiliate.

Unless an exemption applies, covered transactions by the Bank with a single affiliate are limited to $10 \%$ of the Bank's capital and surplus, and with respect to all covered transactions with affiliates in the aggregate, they are limited to $20 \%$ of the Bank's capital and surplus. Section 23B of the Federal Reserve Act and Federal Reserve Regulation W also require that certain transactions between the Bank and its affiliates be on terms substantially the same, or at least as favorable to the Bank, as those prevailing at the time for comparable transactions with or involving other non-affiliated persons.

The Federal Reserve Act and Federal Reserve Regulation O place restrictions and certain reporting requirements on any extension of credit made by a member bank to (a) an executive officer, director, or principal shareholder of the bank, or any company of which the bank is a subsidiary, and of any other subsidiary of that company, and (b) a company controlled by such a person, or to a political or campaign committee that benefits or is controlled by such a person (collectively referred to as "insiders"). These restrictions include limits on loans to one borrower and conditions that must be met before such loans can be made. There is also an aggregate limitation on all loans to insiders and their related interests. Certain restrictions also extend to extensions of credit made to an executive officer, directors, or principal shareholder of a bank (or to a related interest of such person) by a correspondent bank.

## The Volcker Rule

In December 2013, the Federal Reserve, the OCC, the FDIC, the SEC, and the Commodities Futures Trading Commission issued final rules to implement certain provisions of the Dodd-Frank Act commonly known as the "Volker Rule." The Volcker Rule generally prohibits U.S. banks from engaging in proprietary trading and restricts those banking entities from sponsoring, investing in, or having certain relationships with hedge funds and private equity funds. The prohibitions under the Volcker Rule are subject to a number of statutory exemptions, restrictions, and definitions. The Volcker Rule has not had a material impact on the Company's Consolidated Financial Statements, but we continue to evaluate its application to our current and future operations.

## FDIC Insurance

The FDIC provides insurance coverage for certain deposits through the Deposit Insurance Fund, which the FDIC maintains by assessing depository institutions an insurance premium. The Company is assessed deposit insurance premiums by the FDIC using a base rate, to which is added temporary surcharges that are used to establish a FDIC reserve fund and pay certain bond obligations. The Bank's FDIC insurance assessment was $\$ 7.7$ million in 2018, $\$ 8.7$ million in 2017, and $\$ 8.6$ million in 2016.

A depository institution's deposit insurance may be terminated by the FDIC upon a finding that the institution's financial condition is unsafe or unsound, or that the institution has engaged in unsafe or unsound practices, or has violated any applicable rule, regulation, or order or condition enacted or imposed by a regulatory agency. Termination of the Bank's deposit insurance would end its ability to function as a commercial bank in Hawaii.

## Depositor Preference

In the event of the "liquidation or other resolution" of an insured depository institution, claims of insured and uninsured depositors for deposits payable in the United States (including the claims of the FDIC as subrogee of insured depositors), plus certain claims for administrative expenses of the FDIC as a receiver will have priority in payment ahead of unsecured creditors including, in the case of the Bank, its Parent.

## Other Safety and Soundness Regulations

The federal banking agencies also have adopted guidelines prescribing safety and soundness standards. These guidelines establish general standards for internal controls, information systems, internal audit systems, loan documentation, credit underwriting, interest rate risk exposure, asset growth, asset quality, earnings standards, compensation, fees and benefits. In general, the guidelines require appropriate systems and practices to identify and manage the risks and exposures specified in the guidelines before capital becomes impaired.

## Community Reinvestment and Consumer Protection Laws

- Community Reinvestment. The Community Reinvestment Act of 1977 ("CRA") requires the appropriate federal banking agency, in connection with its examination of a bank, to assess the bank's record in meeting the credit needs of the communities served by the bank, including low and moderate income neighborhoods. Under the CRA, institutions are assigned a rating of "outstanding," "satisfactory," "needs to improve," or "substantial noncompliance." The regulatory assessment of the bank's record is made available to the public. Further, these assessments are considered by regulators when evaluating mergers, acquisitions and applicants to open or relocate a branch or facility. The Bank's current CRA rating is "outstanding".
- Consumer Protection Laws. In addition to the CRA, the Bank is subject to a number of federal laws designed to protect borrowers and promote lending to various sectors of the economy and population in connection with its lending activities. These include the Equal Credit Opportunity Act, the Truth-in-Lending Act, the Home Mortgage Disclosure Act and the Real Estate Settlement Procedures Act.

Federal banking regulators, pursuant to the Gramm-Leach-Bliley Act, have enacted regulations limiting the ability of banks and other financial institutions to disclose nonpublic consumer information to non-affiliated third parties. The regulations require disclosure of privacy policies and allow consumers to prevent certain personal information from being shared with non-affiliated third parties. The Fair and Accurate Credit Transaction Act ("FACT Act") requires financial institutions to develop and implement an identity theft prevention program to detect, prevent and mitigate identity theft "red flags" to reduce the risk that customer information will be misused to conduct fraudulent financial transactions.

A number of other federal and state consumer protection laws extensively govern the Bank's relationship with its customers. These laws include the Equal Credit Opportunity Act, the Fair Credit Reporting Act, the Truth in Lending Act, the Truth in Savings Act, the Electronic Fund Transfer Act, the Expedited Funds Availability Act, the Home Mortgage Disclosure Act, the Fair Housing Act, the Real Estate Settlement Procedures Act, the Fair Debt Collection Practices Act, Telephone Consumer Protection Act, the Service Members Civil Relief Act and these laws’ respective state-law counterparts, as well as state and territorial usury laws and laws regarding unfair and deceptive acts and practices. These and other laws subject the Bank to substantial regulatory oversight and, among other things, require disclosures of the cost of credit and terms of deposit accounts, provide substantive consumer rights, prohibit discrimination in credit transactions, regulate the use of credit report information, provide financial privacy protections, prohibit unfair, deceptive and abusive practices, and restrict the Bank's ability to raise interest rates.

The CFPB was created under the Dodd-Frank Act as an agency responsible for promulgating and enforcing regulations designed to protect consumers including adding prohibitions on unfair, deceptive and abusive acts and practices. The CFPB, along with other prudential regulators and the Department of Justice, have also expanded the focus of their regulatory examinations and investigations to include "fair and responsible banking." Fair and responsible banking strives to provide equal credit opportunities to all applicants of a community, to prohibit discrimination by lenders on the basis of certain borrower characteristics, and to ensure that a bank's practices are not deceptive, unfair, or take unreasonable advantage of consumers or businesses. The enhanced focus encompasses the entire loan life cycle, including post-closing activities such as collections and servicing, and pre-application activities such as marketing and loan solicitation and origination.

Violations of applicable consumer protection laws and regulations can result in significant potential liability from litigation brought by customers, including actual damages, restitution and attorneys' fees. Federal bank regulators, state attorneys general and state and local consumer protection agencies may also seek to enforce consumer protection requirements and obtain these and other remedies, including regulatory sanctions, customer rescission rights, and civil money penalties. Failure to comply with consumer protection requirements may also result in our failure to obtain required bank regulatory approvals for transactions the Bank may wish to pursue, or prohibit us from engaging in such transactions even if approval is not required.

## Bank Secrecy Act / Anti-Money Laundering Laws

The Bank is subject to the Bank Secrecy Act and other anti-money laundering laws and regulations, including the USA PATRIOT Act of 2001. The USA PATRIOT Act created new laws, regulations, and penalties, imposed significant new compliance and due diligence obligations, and expanded the application of those laws outside the U.S. Additionally, like all U.S. companies and individuals, the Company is prohibited from transacting business with certain individuals and entities named on the Office of Foreign Asset Control's list of Specially Designed Nationals and Blocked Persons.

The Bank has been required to implement policies, procedures, and controls to detect, prevent, and report potential money laundering and terrorist financing and to verify the identity of its customers. The Company maintains procedures and systems to identify its customers, and to monitor and block transactions related to prohibited persons and entities. Violations of these requirements can result in substantial civil and criminal sanctions. In addition, the federal financial institution regulatory agencies consider the effectiveness of a financial institution's anti-money laundering activities when reviewing bank mergers and BHC acquisitions.

## Employees

As of December 31, 2018, we employed 2,122 full-time equivalent employees.

## Executive Officers of the Registrant

Listed below are executive officers of the Parent as of December 31, 2018.
Peter S. Ho, 53
Chairman and Chief Executive Officer since July 2010 and President since April 2008.
Dean Y. Shigemura, 55
Vice Chair since December 2017, and Chief Financial Officer since March 2017; Senior Executive Vice President and Controller from August 2014 to February 2017; Senior Executive Vice President and Treasurer from May 2008 to July 2014.

Sharon M. Crofts, 53
Vice Chair, Client Solutions Group since April 2016; Vice Chair, Operations and Technology from October 2012 to March 2016.
Wayne Y. Hamano, 64
Vice Chair since December 2008 and Chief Commercial Officer since September 2007.
Kent T. Lucien, 65
Vice Chair and Chief Strategy Officer since March 2017; Vice Chair and Chief Financial Officer from April 2008 to February 2017.
James C. Polk, 52
Vice Chair, Consumer Lending and Deposit Product Group since September 2018 and Consumer and Residential Lending since April 2018; Vice Chair, Mortgage Banking from July 2017 to March 2018; Vice Chair, The Private Bank from June 2016 to June 2017; Senior Executive Vice President, Consumer Banking from January 2016 to May 2016; Senior Executive Vice President, Mortgage Banking from August 2014 to January 2016; Senior Executive Vice President, Commercial Banking from September 2010 to July 2014.

Mark A. Rossi, 69
Vice Chair, Chief Administrative Officer, General Counsel, and Corporate Secretary since February 2007.
Mary E. Sellers, 62
Vice Chair and Chief Risk Officer since July 2005.
Brent T. Flygar, 51
Senior Vice President and Controller since March 2017.

## Item 1A. Risk Factors

There are a number of risks and uncertainties that could negatively affect our business, financial condition or results of operations. We are subject to various risks resulting from changing economic, environmental, political, industry, business, financial and regulatory conditions. The risks and uncertainties described below are some of the important inherent risk factors that could affect our business and operations, although they are not the only risks that may have a material adverse effect on the Company.

Changes in business and economic conditions, in particular those of Hawaii, Guam and other Pacific Islands, could lead to lower revenue, lower asset quality, and lower earnings.

Unlike larger national or other regional banks that are more geographically diversified, our business and earnings are closely tied to the economies of Hawaii and the Pacific Islands. These local economies rely heavily on tourism, the U.S. military, real estate, construction, government, and other service-based industries. Lower visitor arrivals or spending, real or threatened acts of war or terrorism, increases in energy costs, the availability of affordable air transportation, climate change, natural disasters and adverse weather, public health issues including Asian air pollution, and Federal, State of Hawaii and local government budget issues may impact consumer and corporate spending. As a result, such events may contribute to a significant deterioration in general economic conditions in our markets which could adversely impact us and our customers' operations.

General economic conditions in Hawaii remained healthy in 2018, led by a strong tourism industry, relatively low unemployment, rising real estate prices, and an active construction industry. However, deterioration of economic conditions, either locally, nationally, or internationally could adversely affect the quality of our assets, credit losses, and the demand for our products and services, which could lead to lower revenues and lower earnings. The level of visitor arrivals and spending, housing prices, and unemployment rates are some of the metrics that we continually monitor. We also monitor the value of collateral, such as real estate, that secures the loans we have made. The borrowing power of our customers could also be negatively impacted by a decline in the value of collateral.

Any reduction in defense spending by the federal government could adversely impact the economy in Hawaii and the Pacific Islands.
The U.S. military has a major presence in Hawaii and the Pacific Islands. As a result, the U.S. military is an important aspect of the economies in which we operate. The funding of the U.S. military is subject to the overall U.S. Government budget and appropriation decisions and processes which are driven by numerous factors, including geo-political events, macroeconomic conditions, and the ability and willingness of the U.S. Government to enact legislation. U.S. Government appropriations have been and likely will continue to be affected by larger U.S. Government budgetary issues and related legislation. Cuts in defense and other security spending could have an adverse impact on the economies in which we operate, which could adversely affect our business, financial condition, and results of operations.

Changes in interest rates could adversely impact our results of operations and capital.
Our earnings are highly dependent on the spread between the interest earned on loans, leases, and investment securities and the interest paid on deposits and borrowings. We primarily rely on customer deposits as a sizable source of relatively stable and low-cost funds. Changes in market interest rates impact the rates earned on loans, leases, and investment securities and the rates paid on deposits and borrowings. In addition, changes to market interest rates could impact the level of loans, leases, investment securities, deposits, and borrowings, and the credit profile of our current borrowers. Interest rates are affected by many factors beyond our control, and fluctuate in response to general economic conditions, currency fluctuations, and the monetary and fiscal policies of various governmental and regulatory authorities.

Changes in monetary policy, including changes in interest rates, will influence the origination of loans and leases, the purchase of investments, the generation of deposits, and the rates received on loans and investment securities and paid on deposits. Any substantial prolonged change in market interest rates may negatively impact our ability to attract deposits, originate loans and leases, and achieve satisfactory interest rate spreads. If we are unable to continue to fund loans and other assets through customer deposits or access capital markets on favorable terms or if we otherwise fail to manage our liquidity effectively, our liquidity, net interest margin, financial results and conditions may be adversely affected.

## Fiscal and Monetary Policies

The Company's business and earnings are significantly affected by the fiscal and monetary policies of the Federal Government and its agencies. The Bank is particularly affected by the policies of the Federal Reserve, which regulates the supply of money and credit in the United States. Among the instruments of monetary policy available to the Federal Reserve are (a) conducting open market operations in U.S. government securities, (b) changing the discount rates of borrowings of depository institutions, (c) imposing or changing reserve requirements against depository institutions’ deposits, and (d) imposing or changing reserve requirements against certain borrowings by banks and their affiliates. These methods are used in varying degrees and combinations to directly affect the availability of bank loans and deposits, as well as the interest rates charged on loans and paid on deposits. Changes to these policies of the Federal Reserve may have a material effect on our business, results of operations and financial condition.

## Credit losses could increase if economic conditions stagnate or deteriorate.

Although economic conditions are currently healthy nationally and in Hawaii, increased credit losses for us could result if economic conditions stagnate or deteriorate. The risk of nonpayment on loans and leases is inherent in all lending activities. We maintain a reserve for credit losses to absorb estimated probable credit losses inherent in the loan, lease, and commitment portfolios as of the balance sheet date. Management makes various assumptions and judgments about the loan and lease portfolio in determining the level of the reserve for credit losses. Many of these assumptions are based on current economic conditions. Should economic conditions stagnate or deteriorate nationally or in Hawaii, we may experience higher credit losses in future periods.

Inability of our borrowers to make timely repayments on their loans, or decreases in real estate collateral values may result in increased delinquencies, foreclosures, and customer bankruptcies, any of which could have a material adverse effect on our financial condition or results of operations.

Legislation and regulatory initiatives affecting the financial services industry, including new interpretations, restrictions and requirements, could detrimentally affect the Company's business.

The Dodd-Frank Act, enacted in July 2010, triggered sweeping reforms to the financial services industry. Although almost all of the rules and regulations implementing the Dodd-Frank Act have already gone into effect, some of the rules have yet to be implemented and others are being interpreted by federal regulators and the courts. The Dodd-Frank Act, other consumer protection laws, and their implementing rules and regulations are likely to continue to result in increased compliance costs, along with possible restrictions on our products, services and manner of operations, any of which may have a material adverse effect on our operating results and financial condition.

The CFPB has exercised its broad rule-making, supervisory, and examination authority of consumer financial products, as well as expanded data collection and enforcement powers, over depository institutions with more than $\$ 10.0$ billion in assets. Regulation of overall safety and soundness, the CRA, federal housing and flood insurance, as they pertain to consumer financial products and services, remains with the FRB. As a result of greater regulatory scrutiny of consumer financial products as a whole, the Company has become subject to more and expanded regulatory examinations, which also could result in increased costs as well as harm to our reputation in the event of a finding that we have not complied with the increased regulatory requirements.

New laws, regulations, and changes, and the uncertainty surrounding whether such laws, regulations and changes will be implemented, interpreted, repealed or reinstated, in the current regulatory and political climate, may continue to increase our costs of regulatory compliance. They may significantly affect the markets in which we do business, the markets for and value of our investments, and our ongoing operations, costs, and profitability.

Changes in the capital, leverage, liquidity requirements for financial institutions could materially affect future requirements of the Company.
Under Basel III, financial institutions are required to have more capital and a higher quality of capital. Under the final rules issued by the banking regulators, minimum requirements increased for both the quantity and quality of capital held by the Company.

Compliance with Basel III may result in increased capital, liquidity, and disclosure requirements. See the "Regulatory Initiatives Affecting the Banking Industry" section in MD\&A for more information.

## Consumer protection initiatives and court decisions related to the foreclosure process could affect our remedies as a creditor.

Proposed consumer protection initiatives related to the foreclosure process, including voluntary and/or mandatory programs intended to permit or require lenders to consider loan modifications or other alternatives to foreclosure, could increase our credit losses or increase our expense in pursuing our remedies as a creditor.

In addition, Hawaii's appellate courts have made rulings that increase the complexity and risk of nonjudicial, or out-of-court, foreclosures. At the same time, a chronic backlog of cases in the Hawaii courts has slowed the judicial foreclosure process, which may significantly delay the Bank's ability to take over, preserve and sell the mortgaged property. The manner in which these issues are ultimately resolved could impact our foreclosure procedures and costs, which in turn could affect our financial condition or results of operations.

## Competition may adversely affect our business.

Our future depends on our ability to compete effectively. We compete for deposits, loans, leases, and other financial services with a variety of competitors, including banks, thrifts, savings associations, credit unions, mortgage companies, finance companies, mutual funds, brokerage firms, insurance companies, and other non-traditional providers of financial services, including financial service subsidiaries of commercial and manufacturing companies. Some of our competitors are not subject to the same level of regulation and oversight that is required of banks and BHCs, and may benefit from tax exemptions or lower tax rates. As a result, some of these competitors may have lower cost structures.

We expect competitive conditions to intensify as consolidation in the financial services industry continues. The financial services industry is also likely to become more competitive as further technological advances enable more companies, including non-depository institutions, to provide financial services. Also, some of our competitors, through delivery channels such as the Internet, may be based outside of the markets that we serve.

Both federal and local laws provide mechanisms for out-of-state banks and their holding companies to acquire or open branches in our service territories. Failure to effectively address this competitive risk by competing, innovating and making effective use of new and existing channels to deliver our products and services could adversely affect our financial condition or results of operations.

A failure in or breach of our operational systems, information systems, or infrastructure, or those of our third party vendors and other service providers, may result in financial losses, loss of customers, or damage to our reputation.

We rely heavily on communications and information systems to conduct our business. In addition, we rely on third parties to provide key components of our infrastructure, including loan, deposit and general ledger processing, internet connections, and network access. These types of information and related systems are critical to the operation of our business and essential to our ability to perform day-to-day operations, and, in some cases, are critical to the operations of certain of our customers. These third parties with which we do business or that facilitate our business activities, including exchanges, clearing firms, financial intermediaries or vendors that provide services or security solutions for our operations, could also be sources of operational and information security risk to us, including breakdowns or failures of their own systems or capacity constraints. Although we have safeguards and business continuity plans in place, our business operations may be adversely affected by significant and widespread disruption to our physical infrastructure or operating systems that support our business and our customers, resulting in financial losses, loss of customers, or damage to our reputation.

An interruption or breach in security of our information systems or those related to merchants and third party vendors, including as a result of cyber attacks, could disrupt our business, result in the disclosure or misuse of confidential or proprietary information, damage our reputation, or result in financial losses.

Our business requires the collection and retention of large volumes of customer data, including payment card numbers and other personally identifiable information in various information systems that we maintain and in those maintained by third parties with whom we contract to provide data services. We also maintain important internal company data such as personally identifiable information about our employees and information relating to our operations. The integrity and protection of that customer and company data is important to us. As customer, public, legislative and regulatory expectations and requirements regarding operational and information security have increased, our operations systems and infrastructure must continue to be safeguarded and monitored for potential failures, disruptions and breakdowns.

Our technologies, systems, networks and software, and those of other financial institutions have been, and are likely to continue to be, the target of cybersecurity threats and attacks, which may range from uncoordinated individual attempts to sophisticated and targeted measures directed at us. These cybersecurity threats and attacks may include, but are not limited to, attempts to access information, including customer and company information, malicious code, computer viruses and denial of service attacks that could result in unauthorized access, misuse, loss or destruction of data (including confidential customer information), account takeovers, unavailability of service or other events. These types of threats may result from human error, fraud or malice on the part of external or internal parties, intelligence-gathering by foreign governments, or from accidental technological failure internally or by our vendors. Further, to access our products and services our customers may use computers and mobile devices that are beyond our security control systems. The risk of a security breach or disruption, particularly through cyber-attack or cyber intrusion, including by computer hackers, has increased as the number, intensity and sophistication of attempted attacks and intrusions around the world have increased.

Our customers and employees have been, and will continue to be, targeted by parties using fraudulent E-mails and other communications in attempts to misappropriate passwords, payment card numbers, bank account information or other personal information or to introduce viruses or other malware through "trojan horse" programs to our customers' computers. These communications may appear to be legitimate messages sent by the Bank or other businesses, but direct recipients to fake websites operated by the sender of the E-mail or request that the recipient send a password or other confidential information via Email or download a program. Despite our efforts to mitigate these threats through product improvements, use of encryption and authentication technology to secure online transmission of confidential consumer information, and customer and employee education, such attempted frauds against us or our merchants and our third party service providers remain a serious issue. The pervasiveness of cyber security incidents in general and the risks of cyber-crime are complex and continue to evolve. In light of several recent high-profile data breaches involving other companies' losses of customer personal and financial information, we believe this risk could cause customer and/or Bank losses, damage to our brand, and increase our costs through the ongoing cost of technology investments to improve security, as well as the potential financial ad reputational impact of a cyber security incident involving the Company.

Although we make significant efforts to maintain the security and integrity of our information systems and have implemented various measures to manage the risk of a security breach or disruption, there can be no assurance that our security efforts and measures will be effective or that attempted security breaches or disruptions would not be successful or damaging. Even the most well-protected information, networks, systems and facilities remain potentially vulnerable because attempted security breaches, particularly cyber-attacks and intrusions, or disruptions will occur in the future, and because the techniques used in such attempts are constantly evolving and generally are not recognized until launched against a target, and in some cases are designed not to be detected and, in fact, may not be detected. Accordingly, we may be unable to anticipate these techniques or to implement adequate security barriers or other preventative measures, and thus it is virtually impossible for us to entirely mitigate this risk. A security breach or other significant disruption could: 1) disrupt the proper functioning of our networks and systems and therefore our operations and/or those of certain of our customers; 2) result in the unauthorized access to, and destruction, loss, theft, misappropriation or release of confidential, sensitive or otherwise valuable information of ours or our customers, including account numbers and other financial information; 3) result in a violation of applicable privacy, data breach and other laws, subjecting the Bank to additional regulatory scrutiny and exposing the Bank to civil litigation, governmental fines and possible financial liability; 4) require significant management attention and resources to remedy the damages that result; or 5 ) harm our reputation or cause a decrease in the number of customers that choose to do business with us or reduce the level of business that our customers do with us. The occurrence of any such failures, disruptions or security breaches could have a negative impact on our results of operations, financial condition, and cash flows as well as damage our brand and reputation.

Negative public opinion could damage our reputation and adversely impact our earnings and liquidity.
Reputational risk, or the risk to our business, earnings, liquidity, and capital from negative public opinion, could result from our actual or alleged conduct in a variety of areas, including legal and regulatory compliance, lending practices, corporate governance, litigation, ethical issues, or inadequate protection of customer information. We expend significant resources to comply with regulatory requirements. Failure to comply could result in reputational harm or significant legal or remedial costs. Damage to our reputation could adversely affect our ability to retain and attract new customers, and adversely impact our earnings and liquidity.

We are subject to certain litigation, and our expenses related to this litigation may adversely affect our results.
We are, from time-to-time, involved in various legal proceedings arising from our normal business activities. These claims and legal actions, including supervisory actions by our regulators, could involve large monetary claims and significant defense costs. The outcome of these cases is uncertain. Substantial legal liability or significant regulatory action against us could have material financial effects or cause significant reputational harm to us, which in turn could seriously harm our business prospects. We may be exposed to substantial uninsured liabilities, which could materially affect our results of operations and financial condition. Based on information currently available, we believe that the eventual outcome of known actions against us will not be materially in excess of such amounts accrued by us. However, in the event of unexpected future developments, it is possible that the ultimate resolution of those matters may be material to our financial results for any particular period. See the Contingencies section of Note 20 to the Consolidated Financial Statements for more information.

Changes in income tax laws and interpretations, or in accounting standards, could materially affect our financial condition or results of operations.
Further changes in income tax laws could be enacted, or interpretations of existing income tax laws could change, causing an adverse effect on our financial condition or results of operations. Similarly, our accounting policies and methods are fundamental to how we report our financial condition and results of operations. Some of these policies require use of estimates and assumptions that may affect the value of our assets, liabilities, and financial results. Periodically, new accounting standards are issued or existing standards are revised, changing the methods for preparing our financial statements. These changes are not within our control and may significantly impact our financial condition and results of operations.

## Our performance depends on attracting and retaining key employees and skilled personnel to operate our business effectively.

Our success is dependent on our ability to recruit qualified and skilled personnel to operate our business effectively. Competition for these qualified and skilled people is intense. There are a limited number of qualified personnel in the markets we serve, so our success depends in part on the continued services of many of our current management and other key employees. Failure to retain our key employees and maintain adequate staffing of qualified personnel could adversely impact our operations and our ability to compete.

The soundness of other financial institutions may adversely impact our financial condition or results of operations.
Our ability to engage in routine funding transactions could be adversely affected by the actions and commercial soundness of other financial institutions. Financial services institutions are interrelated as a result of trading, clearing, lending, counterparty, or other relationships. As a result, defaults by, or even rumors or questions about, one or more financial services institutions or the financial services industry in general have led to market-wide liquidity problems and could lead to losses or defaults by us or by other institutions. We have exposure to many different industries and counterparties, and we routinely execute transactions with brokers and dealers, commercial banks, investment banks, mutual funds, and other institutional clients. Many of these transactions expose us to credit risk in the event of default of our counterparty or client. In addition, our credit risk may be exacerbated when the collateral held by us cannot be realized upon or is liquidated at prices not sufficient to recover the full amount of the loan or derivative exposure due us. Such losses could materially affect our financial condition or results of operations.

Changes in the capital markets could materially affect the level of assets under management and the demand for our other fee-based services.
Changes in the capital markets could affect the volume of income from and demand for our fee-based services. Our investment management revenues depend in large part on the level of assets under management. Market volatility that leads customers to liquidate investments, move investments to other institutions or asset classes, as well as lower asset values can reduce our level of assets under management and thereby decrease our investment management revenues.

## Our mortgage banking income may experience significant volatility.

Our mortgage banking income is highly influenced by the level and direction of mortgage interest rates, real estate activity, and refinancing activity. Interest rates can affect the amount of mortgage banking activity and impact fee income and the fair value of our derivative financial instruments and mortgage servicing rights. Mortgage banking income may also be impacted by changes in our strategy to manage our residential mortgage portfolio. For example, we may occasionally decide to add more conforming saleable loans to our portfolio (as opposed to selling the loans in the secondary market) which would reduce our gains on sales of residential mortgage loans. These variables could adversely affect mortgage banking income.

Our mortgage loan servicing business may be impacted if we do not meet our obligations, or if servicing standards change.
We act as servicer for mortgage loans sold into the secondary market, primarily to government sponsored entities (GSEs) such as Fannie Mae. As a seller and servicer for those loans, we make warranties about their origination and are required to perform servicing according to complex contractual and handbook requirements. We maintain systems and procedures intended to ensure that we comply with these requirements. We may be penalized and, in limited instances required to repurchase certain mortgages, due to alleged failures to adhere to these requirements. Should GSEs change the requirements in their servicing handbooks, we may sustain higher compliance costs.

The requirement to record certain assets and liabilities at fair value may adversely affect our financial results.
We report certain assets, including available-for-sale investment securities, at fair value. Generally, for assets that are reported at fair value we use quoted market prices or valuation models that utilize market data inputs to estimate fair value. Because we record these assets at their estimated fair value, we may incur losses even if the asset in question presents minimal credit risk. The level of interest rates can impact the estimated fair value of investment securities. Disruptions in the capital markets may require us to recognize other-than-temporary impairments in future periods with respect to investment securities in our portfolio. The amount and timing of any impairment recognized will depend on the severity and duration of the decline in fair value of our investment securities and our estimation of the anticipated recovery period.

The Parent's liquidity is dependent on dividends from the Bank.
The Parent is a separate and distinct legal entity from the Bank. The Parent receives substantially all of its cash in the form of dividends from the Bank. These dividends are the principal source of funds to pay, for example, dividends on the Parent's common stock or to repurchase common stock under the Parent's share repurchase program. Various federal and state laws and regulations limit the amount of dividends that the Bank may pay to the Parent. If the amount of dividends paid by the Bank is further limited, the Parent's ability to meet its obligations, pay dividends to shareholders, or repurchase stock, may be further limited as well.

There can be no assurance that the Parent will continue to declare cash dividends or repurchase stock.
During 2018, the Parent repurchased $1,079,397$ shares of common stock at a total cost of $\$ 88.3$ million under its share repurchase program. The Parent also paid cash dividends of $\$ 98.5$ million during 2018. In January 2019, the Parent's Board of Directors declared a quarterly cash dividend of $\$ 0.62$ per share on the Parent's outstanding shares. In addition, from January 1, 2019 through February 15, 2019, the Parent repurchased an additional 298,500 shares of common stock at an average cost of $\$ 75.46$ per share and a total cost of $\$ 22.5$ million.

Our dividend payments and/or stock repurchases may change from time-to-time, and we cannot provide assurance that we will continue to declare dividends and/or repurchase stock in any particular amounts or at all. Dividends and/or stock repurchases are subject to capital availability and periodic determinations by our Board of Directors. We continue to evaluate the potential impact that regulatory proposals may have on our liquidity and capital management strategies, including Basel III and those required under the Dodd-Frank Act. The actual amount and timing of future dividends and share repurchases, if any, will depend on market and economic conditions, applicable SEC rules, federal and state regulatory restrictions, and various other factors. In addition, the amount we spend and the number of shares we are able to repurchase under our stock repurchase program may further be affected by a number of other factors, including the stock price and blackout periods in which we are restricted from repurchasing shares. A reduction in or elimination of our dividend payments and/or stock repurchases could have a negative effect on our stock price.

Natural disasters and adverse weather could negatively affect real estate property values and bank operations.
Real estate and real estate property values play an important role for the Bank in several ways. The Bank owns or leases many real estate properties in connection with its operations, primarily located in Hawaii with its unique weather and geology. Our business operations could suffer to the extent the Bank cannot utilize its branch network due to damage from weather or other natural disasters. Real estate is also utilized as collateral for many of our loans. A natural disaster in Hawaii or the Pacific Islands could cause property values in the affected areas to fall, which could require the Bank to record an impairment on its financial statements. A natural disaster could also impact borrowers' ability to pay their financial obligations, which would increase our exposure to loan defaults.

## Item 1B. Unresolved Staff Comments

None.

## Item 2. Properties

Our principal offices are located in the Financial Plaza of the Pacific in Honolulu, Hawaii. We own and lease other branch offices and operating facilities located throughout Hawaii and the Pacific Islands. Additional information with respect to premises and equipment is presented in Notes 6 and 20 to the Consolidated Financial Statements.

## Item 3. Legal Proceedings

We are from time to time subject to lawsuits, investigations and claims arising out of the conduct of our business. Management believes that the ultimate resolution of these matters is not likely to materially affect our financial position and results of operations. For additional information, see Note 20 to the Consolidated Financial Statements, under the discussion related to Contingencies.

## 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

## Market Information, Shareholders, and Dividends

Information regarding the historical market prices of the Parent's common stock, book value, and dividends declared on that stock are shown below.

## Market Prices, Book Values, and Common Stock Dividends Per Share

| Year/Period | Market Price Range |  |  |  |  |  | Book Value |  | Dividends Declared |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | High |  | Low |  | Close |  |  |  |  |  |
| 2018 | \$ | 89.09 | \$ | 63.64 | \$ | 67.32 | \$ | 30.56 | \$ | 2.34 |
| First Quarter |  | 89.09 |  | 78.40 |  | 83.10 |  |  |  | 0.52 |
| Second Quarter |  | 88.92 |  | 80.20 |  | 83.42 |  |  |  | 0.60 |
| Third Quarter |  | 86.53 |  | 78.30 |  | 78.91 |  |  |  | 0.60 |
| Fourth Quarter |  | 82.80 |  | 63.64 |  | 67.32 |  |  |  | 0.62 |
| 2017 | \$ | 90.80 | \$ | 74.72 | \$ | 85.70 | \$ | 29.05 | \$ | 2.04 |
| First Quarter |  | 90.80 |  | 77.03 |  | 82.36 |  |  |  | 0.50 |
| Second Quarter |  | 84.99 |  | 75.92 |  | 82.97 |  |  |  | 0.50 |
| Third Quarter |  | 86.19 |  | 74.72 |  | 83.36 |  |  |  | 0.52 |
| Fourth Quarter |  | 88.38 |  | 77.71 |  | 85.70 |  |  |  | 0.52 |

The common stock of the Parent is traded on the New York Stock Exchange (NYSE Symbol: BOH) and quoted daily in leading financial publications. As of February 15 , 2019, there were 5,773 common shareholders of record.

The Parent's Board of Directors considers on a quarterly basis the feasibility of paying a cash dividend to its shareholders and the level and feasibility of repurchasing shares of the Parent's common stock. Under the Parent's historical practice, dividends declared are paid within the quarter. See "Dividend Restrictions" under "Supervision and Regulation" in Item 1 of this report and Note 11 to the Consolidated Financial Statements for more information.

## Issuer Purchases of Equity Securities

| Period | Total Number of Shares Purchased ${ }^{1}$ | Average Price Paid Per Share |  | Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs <br> 109,850 | Approximate Dollar Value of Shares that May Yet Be Purchased Under the Plans or Programs ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| October 1-31, 2018 | 111,462 | \$ | 78.21 |  | \$ | 48,070,958 |
| November 1-30, 2018 | 121,630 |  | 79.32 | 121,500 |  | 38,433,465 |
| December 1-31, 2018 | 94,027 |  | 71.34 | 94,027 |  | 31,725,792 |
| Total | 327,119 | \$ | 76.65 | 325,377 |  |  |

[^0]
## Performance Graph

The following graph shows the cumulative total return for the Parent's common stock compared to the cumulative total returns for the Standard \& Poor's ("S\&P") 500 Index and the S\&P Banks Index. The graph assumes that $\$ 100$ was invested on December 31, 2013 in the Parent's common stock, the S\&P 500 Index, and the S\&P Banks Index. The cumulative total return on each investment is as of December 31 of each of the subsequent five years and assumes reinvestment of dividends.


|  | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 8}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Bank of Hawaii Corporation | $\$ 100$ | $\$ 103$ | $\$ 113$ | $\$ 163$ | $\$ 162$ | $\$ 131$ |
| S\&P 500 Index | $\$ 100$ | $\$ 114$ | $\$ 115$ | $\$ 129$ | $\$ 157$ | $\$ 150$ |
| S\&P Banks Index | $\$ 100$ | $\$ 114$ | $\$ 115$ | $\$ 142$ | $\$ 174$ | $\$ 145$ |

Item 6. Selected Financial Data
Summary of Selected Consolidated Financial Data

| (dollars in millions, except per share amounts) |  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended December 31, |  |  |  |  |  |  |  |  |  |  |
| Operating Results |  |  |  |  |  |  |  |  |  |  |
| Net Interest Income | \$ | 486.4 | \$ | 457.2 | \$ | 417.6 | \$ | 394.1 | \$ | 379.7 |
| Provision for Credit Losses |  | 13.4 |  | 16.9 |  | 4.8 |  | 1.0 |  | (4.9) |
| Total Noninterest Income |  | 168.9 |  | 185.4 |  | 197.3 |  | 186.2 |  | 180.0 |
| Total Noninterest Expense |  | 371.6 |  | 357.7 |  | 350.6 |  | 348.1 |  | 326.9 |
| Net Income |  | 219.6 |  | 184.7 |  | 181.5 |  | 160.7 |  | 163.0 |
| Basic Earnings Per Share |  | 5.26 |  | 4.37 |  | 4.26 |  | 3.72 |  | 3.71 |
| Diluted Earnings Per Share |  | 5.23 |  | 4.33 |  | 4.23 |  | 3.70 |  | 3.69 |
| Dividends Declared Per Share |  | 2.34 |  | 2.04 |  | 1.89 |  | 1.80 |  | 1.80 |
|  |  |  |  |  |  |  |  |  |  |  |
| Performance Ratios |  |  |  |  |  |  |  |  |  |  |
| Net Income to Average Total Assets (ROA) |  | 1.29 | \% | 1.10 | \% | 1.15 | \% | 1.06 | \% | 1.14 \% |
| Net Income to Average Shareholders' Equity (ROE) |  | 17.63 |  | 15.27 |  | 15.79 |  | 14.82 |  | 15.50 |
| Efficiency Ratio ${ }^{1}$ |  | 56.71 |  | 55.66 |  | 57.01 |  | 59.99 |  | 58.41 |
| Net Interest Margin ${ }^{2}$ |  | 3.05 |  | 2.93 |  | 2.83 |  | 2.81 |  | 2.85 |
| Dividend Payout Ratio ${ }^{3}$ |  | 44.49 |  | 46.68 |  | 44.37 |  | 48.39 |  | 48.52 |
| Average Shareholders' Equity to Average Assets |  | 7.34 |  | 7.22 |  | 7.26 |  | 7.16 |  | 7.35 |

Average Balances

| Average Loans and Leases | \$ | 10,043.7 | \$ | 9,346.8 | \$ | 8,362.2 | \$ | 7,423.6 | \$ | 6,405.4 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Average Assets |  | 16,971.0 |  | 16,749.2 |  | 15,825.4 |  | 15,136.5 |  | 14,317.5 |
| Average Deposits |  | 14,757.7 |  | 14,505.4 |  | 13,619.5 |  | 12,925.2 |  | 12,122.1 |
| Average Shareholders' Equity |  | 1,245.7 |  | 1,209.1 |  | 1,149.3 |  | 1,084.1 |  | 1,052.2 |

Weighted Average Shares Outstanding

| Basic Weighted Average Shares | $41,714,770$ | $42,280,931$ | $42,644,100$ | $43,217,818$ |
| :--- | :--- | :--- | :--- | :--- |
| Diluted Weighted Average Shares | $41,999,399$ | $42,607,057$ | $42,879,783$ | $43,454,877$ |

As of December 31,

| Balance Sheet Totals |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loans and Leases | \$ | 10,448.8 | \$ | 9,797.0 | \$ | 8,949.8 | \$ | 7,879.0 | \$ | 6,897.6 |
| Total Assets |  | 17,144.0 |  | 17,089.1 |  | 16,492.4 |  | 15,455.0 |  | 14,787.2 |
| Total Deposits |  | 15,027.2 |  | 14,884.0 |  | 14,320.2 |  | 13,251.1 |  | 12,633.1 |
| Other Debt |  | 135.6 |  | 260.7 |  | 267.9 |  | 245.8 |  | 173.9 |
| Total Shareholders' Equity |  | 1,268.2 |  | 1,231.9 |  | 1,161.5 |  | 1,116.3 |  | 1,055.1 |

## Asset Quality

| Allowance for Loan and Lease Losses | \$ | 106.7 | \$ | 107.3 |  | \$ | 104.3 |  | \$ | 102.9 |  | 108.7 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Non-Performing Assets |  | 12.9 |  | 16.1 |  |  | 19.8 |  |  | 28.8 |  | 30.1 |
| Financial Ratios |  |  |  |  |  |  |  |  |  |  |  |  |
| Allowance to Loans and Leases Outstanding |  | 1.02 | \% | 1.10 | \% |  | 1.17 | \% |  | 1.31 | \% | 1.58 \% |
| Tier 1 Capital Ratio ${ }^{4}$ |  | 13.07 |  | 13.24 |  |  | 13.24 |  |  | 13.97 |  | 14.69 |
| Total Capital Ratio ${ }^{4}$ |  | 14.21 |  | 14.46 |  |  | 14.49 |  |  | 15.22 |  | 15.94 |
| Tier 1 Leverage Ratio ${ }^{4}$ |  | 7.60 |  | 7.26 |  |  | 7.21 |  |  | 7.26 |  | 7.13 |
| Total Shareholders' Equity to Total Assets |  | 7.40 |  | 7.21 |  |  | 7.04 |  |  | 7.22 |  | 7.14 |
| Tangible Common Equity to Tangible Assets ${ }^{5}$ |  | 7.23 |  | 7.04 |  |  | 6.86 |  |  | 7.03 |  | 6.94 |
| Tangible Common Equity to Risk-Weighted Assets ${ }^{4,5}$ |  | 12.52 |  | 12.84 |  |  | 12.81 |  |  | 13.62 |  | 14.46 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Non-Financial Data |  |  |  |  |  |  |  |  |  |  |  |  |
| Full-Time Equivalent Employees |  | 2,122 |  | 2,132 |  |  | 2,122 |  |  | 2,164 |  | 2,161 |
| Branches and Offices |  | 69 |  | 69 |  |  | 69 |  |  | 70 |  | 74 |
| ATMs |  | 382 |  | 387 |  |  | 449 |  |  | 456 |  | 459 |
| Common Shareholders of Record |  | 5,797 |  | 5,982 |  |  | 6,121 |  |  | 6,279 |  | 6,421 |

1 Efficiency ratio is defined as noninterest expense divided by total revenue (net interest income and noninterest income).
2 Net interest margin is defined as net interest income, on a taxable-equivalent basis, as a percentage of average earning assets.
3 Dividend payout ratio is defined as dividends declared per share divided by basic earnings per share.

## Use of Non-GAAP Financial Measures

The ratios "tangible common equity to tangible assets" and "tangible common equity to risk-weighted assets" are Non-GAAP financial measures. The Company believes these measurements are useful for investors, regulators, management and others to evaluate capital adequacy relative to other financial institutions. Although these Non-GAAP financial measures are frequently used by stakeholders in the evaluation of a company, they have limitations as analytical tools, and should not be considered in isolation, or as a substitute for analyses of results as reported under GAAP. The following table provides a reconciliation of these Non-GAAP financial measures with their most closely related GAAP measures.

## GAAP to Non-GAAP Reconciliation

| (dollars in thousands) | December 31, |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  |  | 2017 | 2016 |  | 2015 |  | 2014 |  |
| Total Shareholders' Equity | \$ | 1,268,200 | \$ | 1,231,868 | \$ | 1,161,537 | \$ | 1,116,260 | \$ | 1,055,086 |
| Less: Goodwill |  | 31,517 |  | 31,517 |  | 31,517 |  | 31,517 |  | 31,517 |
| Tangible Common Equity | \$ | 1,236,683 | \$ | 1,200,351 | \$ | 1,130,020 | \$ | 1,084,743 | \$ | 1,023,569 |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Assets | \$ | 17,143,974 | \$ | 17,089,052 | \$ | 16,492,367 | \$ | 15,455,016 | \$ | 14,787,208 |
| Less: Goodwill |  | 31,517 |  | 31,517 |  | 31,517 |  | 31,517 |  | 31,517 |
| Tangible Assets | \$ | 17,112,457 | \$ | 17,057,535 | \$ | 16,460,850 | \$ | 15,423,499 | \$ | 14,755,691 |
| Risk-Weighted Assets, determined in accordance with prescribed regulatory requirements ${ }^{1}$ | \$ | 9,878,904 | \$ | 9,348,296 | \$ | 8,823,485 | \$ | 7,962,484 | \$ | 7,077,035 |
|  |  |  |  |  |  |  |  |  |  |  |
| Total Shareholders' Equity to Total Assets |  | 7.40\% |  | 7.21\% |  | 7.04\% |  | 7.22\% |  | 7.14\% |
| Tangible Common Equity to Tangible Assets (Non-GAAP) |  | 7.23\% |  | 7.04\% |  | 6.86\% |  | 7.03\% |  | 6.94\% |
|  |  |  |  |  |  |  |  |  |  |  |
| Tier 1 Capital Ratio ${ }^{1}$ |  | 13.07\% |  | 13.24\% |  | 13.24\% |  | 13.97\% |  | 14.69\% |
| Tangible Common Equity to Risk-Weighted Assets (Non-GAAP) ${ }^{1}$ |  | 12.52\% |  | 12.84\% |  | 12.81\% |  | 13.62\% |  | 14.46\% |

1 December 31, 2018, 2017, 2016, and 2015 calculated under Basel III rules, which became effective January 1, 2015.

## Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

## Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. These statements can be identified by the fact that they do not relate strictly to historical or current facts and may include statements concerning, among other things, the anticipated economic and business environment in our service area and elsewhere, credit quality and other financial and business matters in future periods, our future results of operations and financial position, our business strategy and plans and our objectives and future operations. We also may make forward-looking statements in our other documents filed with or furnished to the U.S. Securities and Exchange Commission (the "SEC"). In addition, our senior management may make forward-looking statements orally to analysts, investors, representatives of the media and others. Our forward-looking statements are based on numerous assumptions, any of which could prove to be inaccurate, and actual results may differ materially from those projected because of a variety of risks and uncertainties, including, but not limited to: 1) general economic conditions either nationally, internationally, or locally may be different than expected, and particularly, any event that negatively impacts the tourism industry in Hawaii; 2) unanticipated changes in the securities markets, public debt markets, and other capital markets in the U.S. and internationally; 3) competitive pressures in the markets for financial services and products; 4) the impact of legislative and regulatory initiatives, particularly the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") and Economic Growth, Regulatory Relief, and Consumer Protection Act of 2018; 5) changes in fiscal and monetary policies of the markets in which we operate; 6) the increased cost of maintaining or the Company's ability to maintain adequate liquidity and capital, based on the requirements adopted by the Basel Committee on Banking Supervision and U.S. regulators; 7) actual or alleged conduct which could harm our reputation; 8) changes in accounting standards; 9) changes in tax laws or regulations, including Public Law 115-97, commonly known as the Tax Cuts and Jobs Act, or the interpretation of such laws and regulations; 10) changes in our credit quality or risk profile that may increase or decrease the required level of our reserve for credit losses; 11) changes in market interest rates that may affect credit markets and our ability to maintain our net interest margin; 12) the impact of litigation and regulatory investigations of the Company, including costs, expenses, settlements, and judgments; 13) any failure in or breach of our operational systems, information systems or infrastructure, or those of our merchants, third party vendors and other service providers; 14) any interruption or breach of security of our information systems resulting in failures or disruptions in customer account management, general ledger processing, and loan or deposit systems; 15) changes to the amount and timing of proposed common stock repurchases; and 16) natural disasters, public unrest or adverse weather, public health, and other conditions impacting us and our customers' operations or negatively impacting the tourism industry in Hawaii. Given these risks and uncertainties, investors should not place undue reliance on any forward-looking statement as a prediction of our actual results. A detailed discussion of these and other risks and uncertainties that could cause actual results and events to differ materially from such forward-looking statements is included under the section entitled "Risk Factors" in Part I of this report. Words such as "believes," "anticipates," "expects," "intends," "targeted," and similar expressions are intended to identify forward-looking statements but are not the exclusive means of identifying such statements. We undertake no obligation to update forward-looking statements to reflect later events or circumstances, except as may be required by law.

## Critical Accounting Policies

Our Consolidated Financial Statements were prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and follow general practices within the industries in which we operate. The most significant accounting policies we follow are presented in Note 1 to the Consolidated Financial Statements. Application of these principles requires us to make estimates, assumptions, and judgments that affect the amounts reported in the Consolidated Financial Statements and accompanying notes. Most accounting policies are not considered by management to be critical accounting policies. Several factors are considered in determining whether or not a policy is critical in the preparation of the Consolidated Financial Statements. These factors include among other things, whether the policy requires management to make difficult, subjective, and complex judgments about matters that are inherently uncertain and because it is likely that materially different amounts would be reported under different conditions or using different assumptions. The accounting policies which we believe to be most critical in preparing our Consolidated Financial Statements are those that are related to the determination of the reserve for credit losses, fair value estimates, leased asset residual values, and income taxes.

## Reserve for Credit Losses

A consequence of lending activities is that we may incur credit losses. The amount of such losses will vary depending upon the risk characteristics of the loan and lease portfolio as affected by economic conditions such as rising interest rates and the financial performance of borrowers. The reserve for credit losses consists of the allowance for loan and lease losses (the "Allowance") and the reserve for unfunded commitments (the "Unfunded Reserve"). The Allowance provides for probable and estimable losses inherent in our loan and lease portfolio. The Allowance is increased or decreased through the provisioning process. There is no exact method of predicting specific losses or amounts that ultimately may be charged-off on particular segments of the loan and lease portfolio. The Unfunded Reserve is a component of other liabilities and represents the estimate for probable credit losses inherent in unfunded commitments to extend credit. The level of the Unfunded Reserve is adjusted by recording an expense or recovery in other noninterest expense.

Management's evaluation of the adequacy of the reserve for credit losses is often the most critical of accounting estimates for a financial institution. Our determination of the amount of the reserve for credit losses is a critical accounting estimate as it requires significant reliance on the accuracy of credit risk ratings on individual borrowers, the use of estimates and significant judgment as to the amount and timing of expected future cash flows on impaired loans, significant reliance on estimated loss rates on homogenous portfolios, and consideration of our quantitative and qualitative evaluation of economic factors and trends. While our methodology in establishing the reserve for credit losses attributes portions of the Allowance and Unfunded Reserve to the commercial and consumer portfolio segments, the entire Allowance and Unfunded Reserve is available to absorb credit losses inherent in the total loan and lease portfolio and total amount of unfunded credit commitments, respectively.

The reserve for credit losses related to our commercial portfolio segment is generally most sensitive to the accuracy of credit risk ratings assigned to each borrower. Commercial loan risk ratings are evaluated based on each situation by experienced senior credit officers and are subject to periodic review by an independent internal team of credit specialists. The reserve for credit losses related to our consumer portfolio segment is generally most sensitive to economic assumptions and delinquency trends. The reserve for credit losses attributable to each portfolio segment also includes an amount for inherent risks not reflected in the historical analyses. Relevant factors include, but are not limited to, concentrations of credit risk (geographic, large borrower, and industry), economic trends and conditions, changes in underwriting standards, experience and depth of lending staff, trends in delinquencies, and the level of criticized and classified loans.

See Note 4 to the Consolidated Financial Statements and the "Corporate Risk Profile - Credit Risk" section in Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD\&A") for more information on the Allowance and the Unfunded Reserve.

## Fair Value Measurements

Fair value is the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for an asset or liability in an orderly transaction between market participants at the measurement date. The degree of management judgment involved in determining the fair value of a financial instrument is dependent upon the availability of quoted market prices or observable market inputs. For financial instruments that are traded actively and have quoted market prices or observable market inputs, there is minimal subjectivity involved in measuring fair value. However, when quoted market prices or observable market inputs are not fully available, significant management judgment may be necessary to estimate fair value. In developing our fair value measurements, we maximize the use of observable inputs and minimize the use of unobservable inputs.

The fair value hierarchy defines Level 1 valuations as those based on quoted prices, unadjusted, for identical instruments traded in active markets. Level 2 valuations are those based on quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, or model-based valuation techniques for which all significant assumptions are observable in the market. Level 3 valuations are based on model-based techniques that use at least one significant assumption not observable in the market, or significant management judgment or estimation, some of which may be internally developed.

Financial assets that are recorded at fair value on a recurring basis include available-for-sale investment securities, loans held for sale, mortgage servicing rights, investments related to deferred compensation arrangements, and derivative financial instruments. As of December 31, 2018 and 2017, $\$ 2.1$ billion or $12 \%$ and $\$ 2.3$ billion or $13 \%$, respectively, of our total assets consisted of financial assets recorded at fair value on a recurring basis and most of these financial assets consisted of available-for-sale investment securities measured using information from a third-party pricing service. These investments in debt securities and mortgage-backed securities were all classified in either Levels 1 or 2 of the fair value hierarchy. Financial liabilities that are recorded at fair value on a recurring basis are comprised of derivative financial instruments. As of December 31, 2018 and 2017, $\$ 9.7$ million or less than $1 \%$ of our total liabilities consisted of financial liabilities recorded at fair value on a recurring basis. As of December 31, 2018 and 2017, Level 3 financial assets recorded at fair value on a recurring basis were $\$ 15.1$ million and $\$ 11.8$ million, respectively, or less than $1 \%$ of our total assets, and were comprised of mortgage servicing rights and derivative financial instruments. As of December 31, 2018 and 2017, Level 3 financial liabilities recorded at fair value on a recurring basis were $\$ 9.4$ million and $\$ 9.5$ million, respectively, or less than $1 \%$ of our total liabilities, and were comprised of derivative financial instruments.

Our third-party pricing service makes no representations or warranties that the pricing data provided to us is complete or free from errors, omissions, or defects. As a result, we have processes in place to monitor and periodically review the information provided to us by our third-party pricing service such as: 1) Our third-party pricing service provides us with documentation by asset class of inputs and methodologies used to value securities. We review this documentation to evaluate the inputs and valuation methodologies used to place securities into the appropriate level of the fair value hierarchy. This documentation is periodically updated by our third-party pricing service. Accordingly, transfers of securities within the fair value hierarchy are made if deemed necessary. 2) On a quarterly basis, management also selects a sample of securities priced by the Company's third-party pricing service and reviews the significant assumptions and valuation methodologies used by the pricing service with respect to those securities. The information provided is comprised of market reference data, which may include reported trades; bids, offers, or broker-dealer dealer quotes; benchmark yields and spreads; as well as other reference data as appropriate. Periodically, based on these reviews, management determines whether the current placement of the security in the fair value hierarchy is appropriate or whether transfers may be warranted. 3) On a quarterly basis, management reviews the pricing information received from our thirdparty pricing service. This review process includes a comparison to a second source. 4) Our third-party pricing service has also established processes for us to submit inquiries regarding quoted prices. Periodically, we will challenge the quoted prices provided by our third-party pricing service. Our third-party pricing service will review the inputs to the evaluation in light of the new market data presented by us. Our third-party pricing service may then affirm the original quoted price or may update the evaluation on a going forward basis. Generally, we do not adjust the price from the third-party service provider. 5) On an annual basis, we obtain and review the third-party's most recently issued Service Organization Controls report. related to controls placed in operation and tests of operating effectiveness, to update our understanding of the third-party pricing service's control environment.

Based on the composition of our investment securities portfolio, we believe that we have developed appropriate internal controls and performed appropriate due diligence procedures to prevent or detect material misstatements. See Note 21 to the Consolidated Financial Statements for more information on our fair value measurements.

## Income Taxes

We determine our liabilities for income taxes based on current tax regulations and interpretations in tax jurisdictions where our income is subject to taxation. Currently, we file tax returns in seven federal, state and local domestic jurisdictions, and four foreign jurisdictions. In estimating income taxes payable or receivable, we assess the relative merits and risks of the appropriate tax treatment considering statutory, judicial, and regulatory guidance in the context of each tax position. Accordingly, previously estimated liabilities are regularly reevaluated and adjusted through the provision for income taxes. Changes in the estimate of income taxes payable or receivable occur periodically due to changes in tax rates, interpretations of tax law, the status of examinations being conducted by various taxing authorities, and newly enacted statutory, judicial and regulatory guidance that impact the relative merits and risks of each tax position. These changes, when they occur, may affect the provision for income taxes as well as current and deferred income taxes, and may be significant to our statements of income and condition.

Management's determination of the realization of net deferred tax assets is based upon management's judgment of various future events and uncertainties, including the timing and amount of future income, as well as the implementation of various tax planning strategies to maximize realization of the deferred tax assets. A valuation allowance is provided when it is more likely than not that some portion of the deferred tax asset will not be realized. As of December 31, 2018 and 2017, we carried a valuation allowance of $\$ 1.1$ million and $\$ 1.0$ million, respectively, related to our deferred tax assets established in connection with our low-income housing investments.

We are also required to record a liability, referred to as an unrecognized tax benefit ("UTB"), for the entire amount of benefit taken in a prior or future income tax return when we determine that a tax position has a less than $50 \%$ likelihood of being accepted by the taxing authority. As of December 31, 2018 and 2017, our liabilities for UTBs were $\$ 5.5$ million and $\$ 5.3$ million, respectively.

In 2018, the Company recognized federal and State of Hawaii investment tax credits from energy investments. The Company uses the deferral method of accounting for its investment tax credit with the benefit recognized in the provision for income taxes. These credits reduced the Company's provision for income taxes by $\$ 5.0$ million, 5.4 million, and 4.7 million in 2018, 2017 and 2016, respectively.

Public law No. 115-97, known as the Tax Cuts and Jobs Act (the "Tax Act"), which was enacted on December 22, 2017, reduced the U.S. federal corporate tax rate from $35 \%$ to $21 \%$ effective January 1, 2018. Also on December 22, 2017, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 118 ("SAB 118"), which provides guidance on accounting for tax effects of the Tax Act. SAB 118 provides a measurement period of up to one year from the enactment date to complete the accounting. Any adjustments during this measurement period were included in net earnings from continuing operations as an adjustment to income tax expense in the reporting period when such adjustments were determined. Based on the information available and current interpretation of the rules, the Company calculated the impact of the reduction in the corporate tax rate and remeasurement of certain deferred tax assets and liabilities. The provisional amount recorded in the fourth quarter of 2017 related to the remeasurement of the Company's deferred tax balance resulted in additional income tax expense of $\$ 3.6$ million. An additional $\$ 0.1$ million was expensed in the first quarter of 2018 due to the remeasurement of the Company's deferred tax balance. In addition, during the first quarter of 2018, the Company recorded a $\$ 2.0$ million basis adjustment on its low income housing partnership investments, which consequently reduced income tax expense by the same amount. The remeasurement of the Company's deferred tax balance in the third quarter of 2018 resulted in an income tax expense reduction of $\$ 0.3$ million. The Company finalized the impact of the Tax Act in the third quarter of 2018.

## Overview

We are a regional financial services company serving businesses, consumers, and governments in Hawaii, Guam, and other Pacific Islands. Our principal operating subsidiary, the Bank, was founded in 1897 and is the largest independent financial institution in Hawaii.

Our business strategy is to use our unique market knowledge, prudent management discipline and brand strength to deliver exceptional value to our stakeholders. Our business plan is balanced between growth and risk management while maintaining flexibility to adjust to economic changes. We will continue to focus on providing customers with best-in-class service and an innovative mix of products and services. We will also remain focused on continuing to deliver strong financial results while maintaining prudent risk and capital management strategies as well as our commitment to support our local communities.

## Hawaii Economy

General economic conditions in Hawaii remained healthy during 2018, led by a strong tourism industry, relatively low unemployment, rising real estate prices, and an active construction industry. Total visitor arrivals increased $5.9 \%$ and visitor spending increased $6.8 \%$ during 2018 compared to 2017. The statewide seasonally-adjusted unemployment rate was $2.5 \%$ in December 2018 compared to $3.9 \%$ nationally. The volume of single-family home sales on Oahu decreased $7.7 \%$ in 2018 compared to 2017, while the volume of condominium sales on Oahu decreased $2.5 \%$ in 2018 compared to 2017. The median price of single-family home sales and condominium sales on Oahu increased $4.6 \%$ and $3.7 \%$, respectively, in 2018 compared to 2017. As of December 31, 2018, months of inventory of single-family homes and condominiums on Oahu remained low at approximately 2.8 months and 2.9 months, respectively.

## Earnings Summary

Net income for 2018 was $\$ 219.6$ million, an increase of $\$ 34.9$ million or $19 \%$ compared to 2017. Diluted earnings per share were $\$ 5.23$ in 2018, an increase of $\$ 0.90$ or $21 \%$ compared to 2017 . Our return on average assets was $1.29 \%$ in 2018, an increase of 19 basis points from 2017, and our return on average shareholders' equity was $17.63 \%$ in 2018, an increase of 236 basis points from 2017.

Our higher net income in 2018 was primarily due to the following:

- The provision for income taxes was $\$ 50.6$ million in 2018, a decrease of $\$ 32.8$ million or $39 \%$ compared to 2017 primarily due to the federal corporate tax rate changing from $35 \%$ to $21 \%$ as a result of the passage of the Tax Act. The effective tax rate was $18.73 \%$ in 2018 compared to $31.11 \%$ in 2017 .
- Net interest income was $\$ 486.4$ million in 2018, an increase of $\$ 29.1$ million or $6 \%$ compared to 2017. On a taxable-equivalent basis, net interest income was $\$ 491.5$ million in 2018, an increase of $\$ 22.4$ million or $5 \%$ compared to 2017. This increase was primarily due to a higher level of earning assets, including growth in both our commercial and consumer lending portfolios, and higher net interest margin. The higher level of earning assets was primarily funded by higher deposit balances. Net interest margin was $3.05 \%$ in 2018, a 12 basis point increase from 2017, primarily due to our loans, which generally have higher yields than our investment securities, comprising a larger percentage of our earning assets compared to 2017. In addition, yields increased for our commercial loans and investment portfolio. Yields on our loan portfolios increased primarily due to higher yields on floating rate loans. This was partially offset by an increase in rates offered on our deposit products.
- We recorded a $\$ 13.4$ million provision for credit losses in 2018 compared to a $\$ 16.9$ million provision recorded in 2017. The provision recorded was based on our determination that the allowance for loan and lease losses should be $\$ 106.7$ million as of December 31, 2018.

These items were partially offset by the following:

- Investment securities gains (losses), net totaled \$(3.9) million in 2018 compared to $\$ 10.4$ million in 2017. The net losses in 2018 were due to fees paid to the counterparties of our prior Visa Class B share sale transactions combined with a $\$ 1.0$ million payment related to a change in the Visa Class B share conversion ratio. The net gain in 2017 was primarily due the sale of 90,000 Visa Class B shares.
- Salaries and benefits expense was $\$ 213.2$ million in 2018, an increase of $\$ 9.5$ million or $5 \%$ compared to 2017 primarily due to $\$ 9.8$ million increase in merit and minimum wage increases. Medical, dental, and life insurance increased by $\$ 3.8$ million primarily due to higher expenses related to our selfinsured medical plans coupled with increased group medical insurance costs. These increases were partially offset by a $\$ 2.1$ million decrease in incentive compensation. During the fourth quarter of 2017, the Company paid a $\$ 2.2$ million bonus, inclusive of payroll taxes, partly due to anticipated future tax expense reductions resulting from the Tax Act. In addition, share-based compensation decreased by $\$ 2.1$ million as a result of the Company's lower share price. Commission expense also decreased by $\$ 2.1$ million primarily due to a decrease in loan origination and refinancing activity.
- Mortgage banking income was $\$ 8.4$ million in 2018 , a decrease of $\$ 4.5$ million or $35 \%$ compared to 2017 . This decrease was primarily due to reduced sales and margins on sales of conforming saleable loans from current production and from our mortgage loan portfolio.

We maintained a strong balance sheet throughout 2018, with what we believe are adequate reserves for credit losses, and high levels of liquidity and capital.

- Total loans and leases were $\$ 10.4$ billion as of December 31, 2018, an increase of $\$ 0.7$ billion or $7 \%$ from December 31, 2017 primarily due to growth in our consumer lending portfolios.
- The allowance for loan and lease losses (the "Allowance") was $\$ 106.7$ million as of December 31, 2018, a decrease of $\$ 0.7$ million or $1 \%$ from December 31, 2017. The ratio of our Allowance to total loans and leases outstanding decreased to $1.02 \%$ as of December 31, 2018, compared to $1.10 \%$ as of December 31, 2017. The level of our Allowance was commensurate with the Company's credit risk profile, loan portfolio growth and composition, and a healthy Hawaii economy.
- The total carrying value of our investment securities portfolio was $\$ 5.5$ billion as of December 31, 2018, a decrease of $\$ 671.1$ million or $11 \%$ from December 31, 2017. In 2018, we reduced our positions primarily in mortgage-backed securities, municipal debt securities, and corporate debt securities. Government National Mortgage Corporation ("Ginnie Mae") mortgage-backed securities continue to be our largest concentration in our portfolio.
- Total deposits were $\$ 15.0$ billion as of December 31, 2018, an increase of $\$ 0.1$ billion or $1 \%$ from December 31, 2017 primarily due to higher consumer core and time deposits. These increases were partially offset by a decrease in public and other deposits largely due to the strategic decision to reduce public time deposits.
- Total shareholders' equity was $\$ 1.3$ billion as of December 31, 2018, an increase of $\$ 36.3$ million or $3 \%$ from December 31, 2017. We continued to return capital to our shareholders in the form of share repurchases and dividends. During 2018, we repurchased $1,120,755$ shares of common stock at a total cost of $\$ 92.0$ million under our share repurchase program and from employees and/or directors in connection with income tax withholdings related to the vesting of restricted stock, shares purchased for a deferred compensation plan, and stock swaps, less shares distributed from the deferred compensation plan. We also paid cash dividends of $\$ 98.5$ million during 2018.


## Analysis of Statements of Income

Average balances, related income and expenses, and resulting yields and rates are presented in Table 1. An analysis of the change in net interest income, on a taxable-equivalent basis, is presented in Table 2.

Average Balances and Interest Rates - Taxable-Equivalent Basis
Table 1

|  | 2018 |  |  |  |  | 2017 |  |  |  |  | 2016 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (dollars in millions) | Average Balance |  | Income/ Expense |  | $\begin{gathered} \hline \text { Yield/ } \\ \text { Rate } \end{gathered}$ | Average Balance |  | Income/ Expense |  | Yield/ Rate | Average Balance |  | Income/ Expense |  | Yield/ Rate |
| Earning Assets |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest-Bearing Deposits in Other Banks | \$ | 3.2 | \$ | - | 1.05 \% | \$ | 3.4 | \$ | - | 0.45 \% | \$ | 4.1 | \$ | - | 0.22 \% |
| Funds Sold |  | 200.0 |  | 3.7 | 1.86 |  | 23.0 |  | 3.9 | 0.92 |  | 95.9 |  | 2.8 | 0.48 |


| Investment Securities |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Available-for-Sale |  |  |  |  |  |  |  |  |  |  |  |
| Taxable | 1,537.7 | 37.6 | 2.44 |  | 1,659.3 | 33.1 | 2.00 |  | 1,579.1 | 27.7 | 1.75 |
| Non-Taxable | 577.9 | 15.9 | 2.76 |  | 643.7 | 21.0 | 3.27 |  | 690.6 | 21.9 | 3.17 |
| Held-to-Maturity |  |  |  |  |  |  |  |  |  |  |  |
| Taxable | 3,468.4 | 78.4 | 2.26 |  | 3,648.6 | 75.7 | 2.07 |  | 3,615.2 | 72.9 | 2.02 |
| Non-Taxable | 236.5 | 7.5 | 3.17 |  | 240.4 | 9.3 | 3.88 |  | 244.1 | 9.5 | 3.90 |
| Total Investment Securities | 5,820.5 | 139.4 | 2.39 |  | 6,192.0 | 139.1 | 2.25 |  | 6,129.0 | 132.0 | 2.15 |
| Loans Held for Sale | 14.0 | 0.6 | 4.31 |  | 22.6 | 0.9 | 3.99 |  | 32.3 | 1.2 | 3.59 |
| Loans and Leases 1 |  |  |  |  |  |  |  |  |  |  |  |
| Commercial and Industrial | 1,304.8 | 51.9 | 3.98 |  | 1,262.8 | 44.5 | 3.52 |  | 1,179.9 | 40.3 | 3.42 |
| Commercial Mortgage | 2,164.6 | 89.7 | 4.14 |  | 1,977.1 | 75.7 | 3.83 |  | 1,735.2 | 64.5 | 3.72 |
| Construction | 184.9 | 8.6 | 4.68 |  | 238.4 | 11.2 | 4.69 |  | 224.2 | 10.0 | 4.43 |
| Commercial Lease Financing | 176.8 | 4.1 | 2.29 |  | 205.9 | 4.8 | 2.32 |  | 198.6 | 4.8 | 2.40 |
| Residential Mortgage | 3,546.5 | 136.0 | 3.84 |  | 3,307.6 | 126.4 | 3.82 |  | 3,037.0 | 120.6 | 3.97 |
| Home Equity | 1,620.9 | 61.1 | 3.77 |  | 1,467.7 | 53.2 | 3.62 |  | 1,211.9 | 43.7 | 3.61 |
| Automobile | 591.1 | 23.2 | 3.92 |  | 486.5 | 23.2 | 4.78 |  | 416.8 | 21.5 | 5.16 |
| Other 2 | 454.1 | 35.6 | 7.85 |  | 400.8 | 31.8 | 7.93 |  | 358.6 | 27.7 | 7.72 |
| $\underline{\text { Total Loans and Leases }}$ | 10,043.7 | 410.2 | 4.08 |  | 9,346.8 | 370.8 | 3.97 |  | 8,362.2 | 333.1 | 3.98 |
| Other | 39.0 | 1.4 | 3.48 |  | 40.5 | 0.9 | 2.33 |  | 39.2 | 0.8 | 2.07 |
| Total Earning Assets ${ }^{3}$ | 16,120.4 | 555.3 | 3.44 |  | 16,028.3 | 515.6 | 3.22 |  | 15,162.7 | 469.9 | 3.10 |
| Cash and Due from Banks | 241.6 |  |  |  | 158.7 |  |  |  | 129.0 |  |  |
| Other Assets | 609.0 |  |  |  | 562.2 |  |  |  | 533.7 |  |  |
| Total Assets | \$ 16,971.0 |  |  | \$ | 16,749.2 |  |  | \$ | 15,825.4 |  |  |

## Interest-Bearing Liabilities

| Demand | \$ | 2,958.8 | \$ | 4.7 | 0.16 \% | \$ | 2,871.7 | \$ | 1.7 | 0.06 \% | \$ | 2,757.6 | \$ | 0.9 | 0.03 \% |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Savings |  | 5,434.3 |  | 13.6 | 0.25 |  | 5,388.5 |  | 6.7 | 0.12 |  | 5,217.9 |  | 4.6 | 0.09 |
| Time |  | 1,725.9 |  | 22.8 | 1.32 |  | 1,589.4 |  | 13.9 | 0.88 |  | 1,254.9 |  | 7.1 | 0.57 |
| Total Interest-Bearing Deposits |  | 10,119.0 |  | 41.1 | 0.41 |  | 9,849.6 |  | 22.3 | 0.23 |  | 9,230.4 |  | 12.6 | 0.14 |
| Short-Term Borrowings |  | 35.5 |  | 0.8 | 2.13 |  | 17.7 |  | 0.2 | 1.05 |  | 8.4 |  | - | 0.15 |
| Securities Sold Under Agreements to Repurchase |  | 504.7 |  | 18.5 | 3.67 |  | 507.0 |  | 19.6 | 3.86 |  | 569.8 |  | 23.4 | 4.11 |
| Other Debt |  | 211.3 |  | 3.4 | 1.61 |  | 267.9 |  | 4.4 | 1.66 |  | 248.8 |  | 4.3 | 1.71 |
| Total Interest-Bearing Liabilities |  | 10,870.5 |  | 63.8 | 0.59 |  | 10,642.2 |  | 46.5 | 0.44 |  | 10,057.4 |  | 40.3 | 0.40 |
| Net Interest Income |  |  | \$ | 491.5 |  |  |  | \$ | 469.1 |  |  |  | \$ | 429.6 |  |
| Interest Rate Spread |  |  |  |  | 2.85 \% |  |  |  |  | 2.78 \% |  |  |  |  | 2.70 \% |
| Net Interest Margin |  |  |  |  | 3.05 \% |  |  |  |  | 2.93 \% |  |  |  |  | 2.83 \% |
| Noninterest-Bearing Demand Deposits |  | 4,638.7 |  |  |  |  | 4,655.8 |  |  |  |  | 4,389.1 |  |  |  |
| Other Liabilities |  | 216.1 |  |  |  |  | 242.1 |  |  |  |  | 229.6 |  |  |  |
| Shareholders' Equity |  | 1,245.7 |  |  |  |  | 1,209.1 |  |  |  |  | 1,149.3 |  |  |  |
| Total Liabilities and Shareholders' Equity | \$ | 16,971.0 |  |  |  | \$ | 16,749.2 |  |  |  | \$ | 15,825.4 |  |  |  |

1 Non-performing loans and leases are included in the respective average loan and lease balances. Income, if any, on such loans and leases is recognized on a cash basis.
2 Comprised of other consumer revolving credit, installment, and consumer lease financing.
 2016.


[^1]
## Net Interest Income

Net interest income is affected by the size and mix of our balance sheet components as well as the spread between interest earned on assets and interest paid on liabilities. Net interest margin is defined as net interest income, on a taxable-equivalent basis, as a percentage of average earning assets.

Net interest income was $\$ 486.4$ million in 2018, an increase of $\$ 29.1$ million or $6 \%$ compared to 2017. On a taxable-equivalent basis, net interest income was $\$ 491.5$ million in 2018, an increase of $\$ 22.4$ million or $5 \%$ compared to 2017 . This increase was primarily due to a higher level of earning assets, including growth in both our commercial and consumer lending portfolios, and higher net interest margin. The higher level of earning assets was primarily funded by higher deposit balances. Net interest margin was $3.05 \%$ in 2018, a 12 basis point increase from 2017, primarily due to our loans, which generally have higher yields than our investment securities, comprising a larger percentage of our earning assets compared to 2017. In addition, yields increased for our commercial loans and investment portfolio. Yields on our loan portfolios increased primarily due to higher yields on floating rate loans.

Yields on our earning assets increased by 22 basis points in 2018 compared to 2017 primarily due to the shift in the mix of our earning assets from investment securities to loans, which generally have higher yields. Yields on our commercial and industrial and commercial mortgage portfolios increased by 46 basis points and 31 basis points, respectively, primarily due to higher yields on floating rate loans. In addition, yields on our investment securities portfolio increased by 14 basis points primarily due to the higher interest rate environment and lower premium amortization. These yield increases were partially offset by an 86 basis point decrease in yield for our automobile loans portfolio.

Interest rates paid on our interest-bearing liabilities increased 15 basis points in 2018 compared to 2017. Increases to our funding costs were primarily due to higher rates paid on our interest-bearing deposits, a reflection of the higher rate environment. The increase in our funding costs was partially offset by a lower average balance of our public time deposits which decreased by $\$ 209.2$ million. Interest rates paid on our securities sold under agreements to repurchase decreased by 19 basis points from 2017 primarily due to the restructuring of three repurchase agreements with private institutions with an aggregate total of $\$ 200.0$ million. These repurchase agreements had a weighted-average interest rate of $3.94 \%$. The restructuring of the agreements extended the maturity dates to June 2022 and lowered the weighted-average interest rate to $2.70 \%$ effective June 2017.

Average balances of our earning assets increased by $\$ 92.1$ million or $1 \%$ in 2018 compared to 2017 primarily due to loan growth as the average balances of our loans and leases portfolio increased by $\$ 696.9$ million. Offsetting this increase in the average balance of our loans and leases portfolio were a $\$ 371.5$ million decrease in the average balance of investment securities and a $\$ 223.0$ million decrease in the average balance of funds sold. The average balance of our residential mortgage portfolio increased by $\$ 238.9$ million primarily due to a relatively constant level of loan originations combined with a slowdown in payoff activity. The average balance of our commercial mortgage portfolio increased by $\$ 187.5$ million primarily due to continued demand from new and existing customers as a result of healthy Hawaii economy. The average balance of our home equity portfolio increased by $\$ 153.2$ million as a result of continued loan demand in light of a healthy Hawaii economy and stable real estate market conditions. Additionally, utilization on new and existing home equity lines was strong during 2018.

Average balances of our interest-bearing liabilities increased by $\$ 228.3$ million or $2 \%$ in 2018 compared to 2017 primarily due to growth in our consumer and commercial time deposits, along with continued growth in our relationship checking and savings products, offset by the aforementioned lower average balance in our public time deposits. Average balances in our time deposits and core deposits increased by $\$ 136.5$ million and $\$ 132.9$ million, respectively.

Net interest income was $\$ 457.2$ million in 2017, an increase of $\$ 39.7$ million or $9 \%$ compared to 2016. On a taxable-equivalent basis, net interest income was $\$ 469.1$ million in 2017, an increase of $\$ 39.5$ million or $9 \%$ compared to 2016 . This increase was primarily due to a higher level of earning assets, including growth in both our commercial and consumer lending portfolios, and higher net interest margin. The higher level of earning assets was primarily funded by higher deposit balances. Net interest margin was $2.93 \%$ in 2017, a 10 basis point increase from 2016, primarily due to our loans, which generally have higher yields than our investment securities, comprising a larger percentage of our earning assets compared to 2016. In addition, yields increased for our commercial loans and investment portfolio. Yields on our loan portfolios increased primarily due to higher yields on floating rate loans. This was partially offset by an increase in rates offered on our deposit products.

Yields on our earning assets increased by 12 basis points in 2017 compared to 2016 primarily due to the shift in the mix of our earning assets from funds sold to loans which generally have higher yields. Yields on our commercial and industrial and commercial mortgage portfolios increased by 10 basis points and 11 basis points, respectively, primarily due to higher yields on floating rate loans. In addition, yields on our investment securities portfolio increased by 10 basis points primarily due to the higher interest rate environment and lower premium amortization. These yield increases were partially offset by a 15 basis point yield decrease in our residential mortgage loan portfolio, primarily due to continued payoff activity of higher-rate mortgage loans and the addition of lowerrate mortgage loans to our portfolio.

Interest rates paid on our interest-bearing liabilities increased four basis points in 2017 compared to 2016. Interest rates paid on our time deposits increased by 31 basis points due to new public time deposits at higher rates. Interest rates paid on our securities sold under agreements to repurchase decreased by 25 basis points from 2016 due to the restructuring of three repurchase agreements with private institutions with an aggregate total of $\$ 200.0$ million during the second quarter of 2017. These repurchase agreements were to mature in 2018 and had a weighted-average interest rate of $3.94 \%$. The restructuring of the agreements extended the maturity dates to June 2022 and lowered the weighted-average interest rate to $2.70 \%$ effective June 2017. The remaining balance in our repurchase agreements consists mainly of those with private entities which have relatively longer terms at higher interest rates. The increases to our funding costs were largely offset by growth in our demand and savings deposits, which generally have lower rates than other funding sources. The average balance of these core deposits increased by $\$ 284.7$ million or $4 \%$ in 2017 compared to 2016.

Average balances of our earning assets increased by $\$ 865.6$ million or $6 \%$ in 2017 compared to 2016 primarily due to loan growth as the average balances of our loans and leases portfolio increased by $\$ 984.6$ million. The average balance of our commercial and industrial portfolio increased by $\$ 82.9$ million due to increase in corporate demand for funding. The average balance of our commercial mortgage portfolio increased by $\$ 241.9$ million as a result of continued demand from new and existing customers as the Hawaii economy continued to be strong coupled with the transfer of construction loans into this loan portfolio upon project completion. The average balance of our residential mortgage portfolio increased by $\$ 270.6$ million primarily due to a relatively constant level of loan originations combined with a slowdown in payoff activity. The average balance of our home equity portfolio increased by $\$ 255.8$ million as a result of healthy loan demand in light of a strong Hawaii economy and improved real estate market conditions. Additionally, utilization on new and existing home equity lines remained steady during 2017. In addition to the increase in the average balances of our loan and lease portfolio, there was a $\$ 63.0$ million increase in the average balance of our investment securities portfolio in 2017.

Average balances of our interest-bearing liabilities increased by $\$ 584.8$ million or $6 \%$ in 2017 compared to 2016 primarily due to growth in our time deposits, along with continued growth in our relationship checking and savings products.

## Provision for Credit Losses

The provision for credit losses (the "Provision") reflects our judgment of the expense or benefit necessary to achieve the appropriate amount of the Allowance. We maintain the Allowance at levels adequate to cover our estimate of probable credit losses as of the end of the reporting period. The Allowance is determined through detailed quarterly analyses of our loan and lease portfolio. The Allowance is based on our loss experience and changes in the economic environment, as well as an ongoing assessment of our credit quality. We recorded a Provision of $\$ 13.4$ million in 2018, $\$ 16.9$ million in 2017, and $\$ 4.8$ million in 2016. For further discussion on the Allowance, see the "Corporate Risk Profile - Credit Risk" section in MD\&A.

## Noninterest Income

Table 3 presents the major components of noninterest income for 2018, 2017, and 2016.
Noninterest Income
Table 3

|  | Year Ended December 31, |  |  |  |  |  | Dollar Change |  |  |  | Percent Change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (dollars in thousands) |  | 2018 |  | 2017 |  | 2016 |  | $\begin{array}{r} 2018 \\ \text { to } 2017 \end{array}$ |  | $\begin{array}{r} 2017 \\ \text { to } 2016 \end{array}$ | $\begin{array}{r} 2018 \\ \text { to } 2017 \end{array}$ | $\begin{array}{r} 2017 \\ \text { to } 2016 \end{array}$ |
| Trust and Asset Management | \$ | 43,877 | \$ | 45,430 | \$ | 46,203 | \$ | $(1,553)$ | \$ | (773) | (3)\% | (2)\% |
| Mortgage Banking |  | 8,437 |  | 12,949 |  | 19,895 |  | $(4,512)$ |  | $(6,946)$ | (35) | (35) |
| Service Charges on Deposit Accounts |  | 28,811 |  | 32,575 |  | 33,654 |  | $(3,764)$ |  | $(1,079)$ | (12) | (3) |
| Fees, Exchange, and Other Service Charges |  | 57,482 |  | 54,845 |  | 55,176 |  | 2,637 |  | (331) | 5 | (1) |
| Investment Securities Gains (Losses), Net |  | $(3,938)$ |  | 10,430 |  | 10,203 |  | $(14,368)$ |  | 227 | (138) | 2 |
| Annuity and Insurance |  | 5,822 |  | 6,858 |  | 7,017 |  | $(1,036)$ |  | (159) | (15) | (2) |
| Bank-Owned Life Insurance |  | 7,199 |  | 6,517 |  | 6,561 |  | 682 |  | (44) | 10 | (1) |
| Other |  | 21,233 |  | 15,813 |  | 18,634 |  | 5,420 |  | $(2,821)$ | 34 | (15) |
| Total Noninterest Income | \$ | 168,923 | \$ | 185,417 | \$ | 197,343 | \$ | $(16,494)$ | \$ | $(11,926)$ | (9)\% | (6)\% |

Trust and asset management income is comprised of fees earned from the management and administration of trusts and other customer assets. These fees are largely based upon the market value of the assets that we manage and the fee rate charged to customers. Total trust assets under administration were $\$ 9.4$ billion, $\$ 9.3$ billion, and $\$ 8.8$ billion as of December 31, 2018, 2017, and 2016, respectively. Trust and asset management income decreased by $\$ 1.6$ million or $3 \%$ in 2018 compared to 2017 due to a decrease in special service fees ( $\$ 0.6$ million), employee benefit trust fees ( $\$ 0.5$ million), and other trust fees ( $\$ 0.3$ million) primarily due to a decline in the number of customer accounts under administration. Trust and asset management income decreased by $\$ 0.8$ million or $2 \%$ in 2017 compared to 2016 primarily due to a $\$ 1.2$ million decrease in special service fees mainly the result of a service fee received from the sale of real estate in second quarter of 2016. This increase was partially offset by a $\$ 0.7$ million increase in agency fees primarily due to an increase in market value of accounts.

Mortgage banking income is highly influenced by mortgage interest rates, the housing market, the amount of our loan sales, and our valuation of mortgage servicing rights. Mortgage banking income decreased by $\$ 4.5$ million or $35 \%$ in 2018 compared to 2017. This decrease was primarily due to reduced sales of conforming saleable loans from current production. There were no sales from our mortgage loan portfolio in 2018. Mortgage banking income decreased by $\$ 6.9$ million or $35 \%$ in 2017 compared to 2016. This decrease was primarily due to reduced sales and margins on sales of conforming saleable loans from current production and from our mortgage loan portfolio.

Service charges on deposit accounts decreased by $\$ 3.8$ million or $12 \%$ in 2018 compared to 2017. This decrease was primarily due to a $\$ 2.3$ million decrease in account analysis fees and a $\$ 1.7$ million decrease in overdraft fees, partially offset by an increase in other service and monthly fees. Service charges on deposit accounts decreased by $\$ 1.1$ million or $3 \%$ in 2017 compared to 2016. This decrease was primarily due to a $\$ 0.8$ million decrease in overdraft fees due in part to higher customer deposit balances and a $\$ 0.7$ decrease in account analysis fees.

Fees, exchange, and other service charges are primarily comprised of debit and credit card income, fees from ATMs, merchant service activity, and other loan fees and special charges. Fees, exchange, and other service charges increased by $\$ 2.6$ million or $5 \%$ primarily due to $\$ 2.3$ million increase in merchant income, which was recorded as a reduction of other noninterest expense in 2017. This accounting change was related to the 2018 adoption of the new revenue recognition accounting guidance. Fees, exchange, and other service charges decreased $\$ 0.3$ million or $1 \%$ in 2017 compared to 2016 primarily due to decreases in other loan fees ( $\$ 0.8$ million) and ATM fees ( $\$ 0.5$ million), largely offset by a $\$ 0.9$ million increase in debit card fees primarily due to increased transaction volume.

Net gains (losses) on sales of investment securities totaled $\$(3.9)$ million, $\$ 10.4$ million, and $\$ 10.2$ million, in 2018, 2017, and 2016, respectively. The net loss in 2018 was primarily due to fees paid to the counterparties of our prior Visa Class B share sale transactions. In addition, in June 2018, Visa announced a reduction of the conversion ratio of its Class B shares from 1.6483 to 1.6298 effective June 28, 2018. As a result, the Company recorded a $\$ 1.0$ million liability in June 2018, which was paid to previous buyers of our Visa Class B shares in July 2018. The net gains in 2017 and 2016 were due to gains on the sale of 90,000 and 100,000 Visa Class B restricted shares in 2017 and 2016, respectively. We received these Class B shares in 2008 as part of Visa’s initial public offering. These shares are transferable only under limited circumstances until they can be converted into the publicly traded Class A shares. This conversion will not occur until the settlement of certain litigation which is indemnified by Visa members such as the Company. Visa funded an escrow account from its initial public offering to settle these litigation claims. Should this escrow account not be sufficient to cover these litigation claims, Visa is entitled to fund additional amounts to the escrow account by reducing each member bank's Class B conversion ratio to unrestricted Class A shares. Concurrent with the sale of these Visa Class B shares, we entered into an agreement with the buyer that requires payment to the buyer in the event Visa further reduces the conversion ratio. Based on the existing transfer restriction and the uncertainty of the covered litigation, the remaining 83,014 Visa Class B shares ( 135,296 Class A equivalent shares) that we own are carried at a zero cost basis as of December 31, 2018. We also contributed to the Bank of Hawaii Foundation 3,600, 4,300, and 7,800, Visa Class B shares during 2018, 2017, and 2016, respectively.

Annuity and insurance income decreased by $\$ 1.0$ million or $15 \%$ in 2018 compared to 2017 primarily due to a $\$ 0.7$ million decrease in income related to our annuity products. Annuity and insurance income decreased by $\$ 0.2$ million or $2 \%$ in 2017 compared to 2016 primarily due to a decrease in income related to our annuity products.

Bank-owned life insurance increased by $\$ 0.7$ million or $10 \%$ in 2018 compared to 2017 primarily due to death benefits received. Bank-owned life insurance remained relatively unchanged in 2017 compared to 2016.

Other noninterest income increased by $\$ 5.4$ million or $34 \%$ in 2018 compared to 2017 primarily due to a distribution received in the first quarter of 2018 from a low-income housing investment sale totaling $\$ 2.8$ million combined with a $\$ 1.1$ million increase in fees from our customer interest rate swap derivatives and a $\$ 0.8$ million increase in net gain on sale of leased assets. Other noninterest income decreased by $\$ 2.8$ million or $15 \%$ in 2017 compared to 2016. This decrease was primarily due to a $\$ 2.3$ million decrease in fees from our customer interest rate swap derivatives, and a $\$ 0.9$ million decrease in net gain on sale of leased assets.

## Noninterest Expense

Table 4 presents the major components of noninterest expense for 2018, 2017, and 2016.
Noninterest Expense
Table 4

|  | Year Ended December 31, |  |  |  |  |  | Dollar Change |  |  |  | Percent Change |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (dollars in thousands) |  | 2018 |  | 2017 |  | 2016 |  | $\begin{array}{r} 2018 \\ \text { to } 2017 \end{array}$ |  | $\begin{array}{r} 2017 \\ \text { to } 2016 \end{array}$ | $\begin{array}{r} 2018 \\ \text { to } 2017 \end{array}$ | $\begin{array}{r} 2017 \\ \text { to } 2016 \end{array}$ |
| Salaries and Benefits: |  |  |  |  |  |  |  |  |  |  |  |  |
| Salaries | \$ | 132,884 | \$ | 122,334 | \$ | 116,721 | \$ | 10,550 | \$ | 5,613 | 9 \% | 5 \% |
| Incentive Compensation |  | 20,687 |  | 22,834 |  | 23,409 |  | $(2,147)$ |  | (575) | (9) | (2) |
| Share-Based Compensation |  | 8,074 |  | 10,184 |  | 12,150 |  | $(2,110)$ |  | $(1,966)$ | (21) | (16) |
| Commission Expense |  | 4,418 |  | 6,493 |  | 7,514 |  | $(2,075)$ |  | $(1,021)$ | (32) | (14) |
| Retirement and Other Benefits ${ }^{1}$ |  | 17,313 |  | 16,347 |  | 15,465 |  | 966 |  | 882 | 6 | 6 |
| Payroll Taxes |  | 11,389 |  | 11,025 |  | 10,133 |  | 364 |  | 892 | 3 | 9 |
| Medical, Dental, and Life Insurance |  | 16,134 |  | 12,362 |  | 13,038 |  | 3,772 |  | (676) | 31 | (5) |
| Separation Expense |  | 2,309 |  | 2,150 |  | 923 |  | 159 |  | 1,227 | 7 | 133 |
| Total Salaries and Benefits |  | 213,208 |  | 203,729 |  | 199,353 |  | 9,479 |  | 4,376 | 5 | 2 |
| Net Occupancy |  | 34,742 |  | 32,536 |  | 30,252 |  | 2,206 |  | 2,284 | 7 | 8 |
| Net Equipment |  | 23,852 |  | 22,078 |  | 20,578 |  | 1,774 |  | 1,500 | 8 | 7 |
| Data Processing |  | 17,846 |  | 15,483 |  | 15,208 |  | 2,363 |  | 275 | 15 | 2 |
| Professional Fees |  | 9,992 |  | 11,681 |  | 10,072 |  | $(1,689)$ |  | 1,609 | (14) | 16 |
| FDIC Insurance |  | 7,732 |  | 8,666 |  | 8,615 |  | (934) |  | 51 | (11) | 1 |
| Other Expense: |  |  |  |  |  |  |  |  |  |  |  |  |
| Delivery and Postage Services |  | 8,535 |  | 8,963 |  | 9,909 |  | (428) |  | (946) | (5) | (10) |
| Mileage Program Travel |  | 4,697 |  | 4,822 |  | 4,712 |  | (125) |  | 110 | (3) | 2 |
| Merchant Transaction and Card Processing Fees |  | 5,247 |  | 4,052 |  | 4,344 |  | 1,195 |  | (292) | 29 | (7) |
| Advertising |  | 5,987 |  | 5,982 |  | 5,992 |  | 5 |  | (10) | - | - |
| Amortization - Solar Energy Partnership Investments |  | 3,665 |  | 3,311 |  | 4,072 |  | 354 |  | (761) | 11 | (19) |
| Other ${ }^{1}$ |  | 36,121 |  | 36,388 |  | 37,471 |  | (267) |  | $(1,083)$ | (1) | (3) |
| Total Other Expense |  | 64,252 |  | 63,518 |  | 66,500 |  | 734 |  | $(2,982)$ | 1 | (4) |
| Total Noninterest Expense | \$ | 371,624 | \$ | 357,691 | \$ | 350,578 | \$ | 13,933 | \$ | 7,113 | 4 \% | $2 \%$ |

 expense for the year ended December 31, 2017 and 2016.

Total salaries and benefits increased by $\$ 9.5$ million or $5 \%$ in 2018 compared to 2017 primarily due to $\$ 9.8$ million in merit and minimum wage increases. Medical, dental, and life insurance increased by $\$ 3.8$ million primarily due to higher expenses related to our self-insured medical plans coupled with increased group medical insurance costs. These increases were partially offset by a $\$ 2.1$ million decrease in incentive compensation. During the fourth quarter of 2017, the Company paid a $\$ 2.2$ million bonus, inclusive of payroll taxes, partly due to anticipated future tax expense reductions resulting from the Tax Act. In addition, share-based compensation decreased by $\$ 2.1$ million as a result of the Company's lower share price. Commission expense also decreased by $\$ 2.1$ million primarily due to a decrease in loan origination and refinancing activity. Total salaries and benefits increased by $\$ 4.4$ million or $2 \%$ in 2017 compared to 2016 due in part to the aforementioned $\$ 2.2$ million bonus, paid in the fourth quarter 2017. In addition, separation expense increased by $\$ 1.2$ million. These increases were partially offset by a $\$ 2.0$ million decrease in share-based compensation. Commission expense also decreased by $\$ 1.0$ million primarily due to a decrease in loan origination and refinancing activity.

Net occupancy expense increased by $\$ 2.2$ million or $7 \%$ in 2018 compared to 2017 due to a $\$ 1.0$ million increase in ATM lease space rental costs in 2018. These ATM lease space rental costs were recorded as a reduction of ATM fee income in 2017. This accounting change was related to the 2018 adoption of the new revenue recognition accounting guidance. In addition, this increase was due to the increases in utilities and depreciation expenses by $\$ 0.6$ million and $\$ 0.3$ million, respectively. Net occupancy expense increased by $\$ 2.3$ million or $8 \%$ in compared to 2016 primarily due to a $\$ 3.4$ million decrease in net gain on sale of real estate from $\$ 3.7$ million in 2016 to $\$ 0.3$ million in 2017. This increase was offset by a $\$ 0.9$ million decrease in net rental expense.

Net equipment expense increased by $\$ 1.8$ million or $8 \% 2018$ compared to 2017 primarily due to a $\$ 1.1$ million increase in depreciation expense. In addition, branches and information technology rent expense increased by $\$ 0.6$ million. Net equipment expense increased by $\$ 1.5$ million or $7 \%$ in 2017 compared to 2016 primarily due to a $\$ 0.8$ million increase in software license fees and maintenance and a $\$ 0.5$ million increase in depreciation expense.

Data processing expense increased by $\$ 2.4$ million or $15 \%$ in 2018 compared to 2017 due to ongoing information technology projects. Data processing expense remained relatively unchanged in 2017 compared to 2016.

Professional fees decreased by $\$ 1.7$ million or $14 \%$ in 2018 compared to 2017 primarily due to a decrease in professional services in our mortgage division. Professional fees increased by $\$ 1.6$ million or $16 \%$ in 2017 compared to 2016 primarily due to a $\$ 0.9$ million increase in legal fees and a $\$ 0.8$ million increase in professional services primarily in our mortgage division.

Other noninterest expense increased by $\$ 0.7$ million or $1 \%$ in 2018 compared to 2017 due to $\$ 2.7$ million in legal reserves recorded during 2018. Operating losses, which include losses as a result of bank error, fraud, items processing, or theft, increased by $\$ 1.2$ million, partially offset by a decrease in business travel of $\$ 0.9$ million, a $\$ 0.9$ million decrease in credit card expense due to the completed sale of our MyBankoh Rewards Credit Card portfolio on November 1,2018 , and a decrease in temporary services of $\$ 0.7$ million. Other noninterest expense decreased by $\$ 3.0$ million or $5 \%$ in 2017 compared to 2016 due to a $\$ 0.9$ million decrease in delivery and postage services and a $\$ 0.8$ million decrease in solar energy tax credit partnership amortization expense.

## Income Taxes

Table 5 presents our provision for income taxes and effective tax rates for 2018, 2017, and 2016:
Provision for Income Taxes and Effective Tax Rates
Table 5

| (dollars in thousands) | Provision for Income Taxes | Effective Tax Rates |
| :--- | ---: | ---: |
| 2018 | $\$ 18$ | 50,624 |
| 2017 | 83,392 |  |
| 2016 | 78,133 | $31.11 \%$ |

The provision for income taxes was $\$ 50.6$ million in 2018, a decrease of $\$ 32.8$ million or $39 \%$ compared to 2017. The effective tax rate was $18.73 \%$ in 2018 compared to $31.11 \%$ in 2017. The lower effective tax rate in 2018 compared to 2017 was due primarily to the Tax Act enacted into law on December 22, 2017. The Tax Act made changes to the U.S. tax code, including reducing the U.S. federal tax rate from $35 \%$ to $21 \%$ effective January 1 , 2018.

A reduction in the corporate tax rate set forth in the Tax Act discussed above also affected the Company's primary benefits received from low income housing investments. The impact of the change in tax rate on the Company's accounting for such investments was reevaluated, resulting in a $\$ 2$ million reduction in the amortization of the net investment, which also favorably impacted the effective tax rate in 2018 . These items were partially offset by a $\$ 3.3$ million decrease in the release of valuation allowances for low income housing investments in 2018 compared to 2017.

The provision for income taxes was $\$ 83.4$ million in 2017, an increase of $\$ 5.3$ million or $7 \%$ compared to 2016 . The effective tax rate was $31.11 \%$ in 2017 compared to $30.10 \%$ in 2016. The higher effective tax rate in 2017 compared to 2016 was primarily due to a $\$ 3.6$ million charge for the write down of net deferred tax assets as a result of the Tax Act discussed above. A $\$ 3.0$ million state tax reserve release in 2016 due to the lapse in the statute of limitations related to prior tax years also favorably impacted the effective tax rate in 2016 . These items were partially offset by a $\$ 2.5$ million tax benefit from the exercise of stock options and the vesting of restricted stock in 2017 and a $\$ 2.1$ million increase in the release of valuation allowances for low income housing investments in 2017 compared to 2016.

## Analysis of Business Segments

Our business segments are Retail Banking, Commercial Banking, Investment Services and Private Banking, and Treasury and Other. Table 6 summarizes net income from our business segments for 2018, 2017, and 2016. Additional information about segment performance is presented in Note 13 to the Consolidated Financial Statements.

| Business Segment Net Income |  |  |  |  |  | Table 6 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (dollars in thousands) | Year Ended December 31, |  |  |  |  |  |
|  | 2018 |  | 2017 |  |  | 2016 |
| Retail Banking | \$ | 87,632 | \$ | 80,723 | \$ | 74,635 |
| Commercial Banking |  | 94,230 |  | 76,862 |  | 77,297 |
| Investment Services and Private Banking |  | 22,661 |  | 15,842 |  | 14,081 |
| Total |  | 204,523 |  | 173,427 |  | 166,013 |
| Treasury and Other |  | 15,079 |  | 11,245 |  | 15,448 |
| Consolidated Total | \$ | 219,602 | \$ | 184,672 | \$ | 181,461 |

## Retail Banking

Net income increased by $\$ 6.9$ million or $9 \%$ in 2018 compared to 2017 primarily due to a decrease in the effective income tax rate used to allocate the provision for income taxes. This was partially offset by a decrease in noninterest income, an increase in noninterest expense, and an increase in the Provision. The decrease in noninterest income was primarily due to reduced sales of conforming saleable loans from our mortgage portfolio and lower margins on those sales. In addition, overdraft fees decreased. Noninterest expense increased primarily due to a $\$ 2.0$ million increase in legal reserves recorded in the first quarter of 2018 and higher allocated technology, operations, and finance expense. This was partially offset by the reclassification of certain ATM and debit transaction processing fees, in 2018, as contra revenue, and decreases in professional fees and salaries and benefits. The increase in the Provision was primarily due to higher net charge-offs in our credit card portfolio, which was sold on November 1, 2018, our home equity portfolio due to lower recoveries, as well as overdrafts; this was partially offset by lower net charge-offs in our residential mortgage portfolio.

Net income increased by $\$ 6.1$ million or $8 \%$ in 2017 compared to 2016 primarily due to an increase in net interest income, partially offset by a decrease in noninterest income and an increase in the Provision. The increase in net interest income was primarily due to higher volume in both the lending and deposit portfolios as well as higher earnings credits on the segment's deposit portfolio. The decrease in noninterest income is primarily due to lower mortgage loan sales and reduced margins on those sales. The increase in the Provision was primarily due to higher net charge-offs in our installment loan, credit card, auto loan, and mortgage loan portfolios, partially offset by lower net charge-offs in our home equity loan and personal credit line portfolios.

## Commercial Banking

Net income increased by $\$ 17.4$ million or $23 \%$ in 2018 compared to 2017 primarily due to increases in net interest income and noninterest income, and a decrease in the provision for income taxes. These were partially offset by an increase in noninterest expense. The increase in net interest income was primarily due to higher earnings credits on the segment's deposit portfolio. The increase in noninterest income was primarily due to higher merchant income stemming from the adoption of ASU No. 2014-09 "Revenue from Contracts with Customers: (Topic 606), higher fees related to our customer interest rate swap derivative program, and to higher net gains on sale of leased equipment. This increase was partially offset by lower account analysis fees as a result of higher earnings credit rates on customer accounts. The decrease in the Provision was due to higher net recovery of loans and leases in 2018. The increase in noninterest expense was primarily due to higher salaries, operating and allocated expenses. The increase in operating expenses was due to the aforementioned adoption of ASU No. 2014-09s. The decrease in the provision for income taxes was due to the lower effective tax rate allocated to the segment.

Net income decreased by $\$ 0.4$ million or $1 \%$ in 2017 compared to 2016 primarily due to a decrease in noninterest income, and increases to the Provision and noninterest expense. This was partially offset by an increase in net interest income. The decrease in noninterest income was primarily due to lower net gains on sale of leased equipment, lower fees related to our customer interest rate swap derivatives and lower non-recurring loan fees. The increase in the Provision was due to lower net recoveries of loans and leases in 2017. The increase in noninterest expense was primarily due to higher salaries and benefits expense and to higher allocated expenses. The increase in net interest income was primarily due to higher volume in both the lending and deposit portfolios, and partially due to higher earnings credits on the segment's deposit portfolio.

Net income increased by $\$ 6.8$ million or $43 \%$ in 2018 compared to 2017 primarily due to an increase in net interest income, partially offset by an increase in noninterest expense and a decrease in noninterest revenue. The increase in net interest income was primarily driven by the transfer of deposits and loans from the Retail Banking segment and growth of the segment's deposit portfolio. The increase in noninterest expense was primarily due to higher salaries and benefits expense, a one-time charge-off, and higher allocated expenses. The decrease in noninterest revenue was driven by lower annuity sales and lower trust service fees.

Net income increased by $\$ 1.8$ million or $13 \%$ in 2017 compared to 2016 primarily due to an increase in net interest income, partially offset by increases in noninterest expense. The increase in net interest income was primarily driven by the transfer of deposits from the Retail Banking segment and growth of the segment's deposit portfolio. The increase in noninterest expense was primarily due to higher salaries and benefits expense and an operational recovery in the second quarter of 2016.

## Treasury and Other

Net income increased by $\$ 3.8$ million or $34 \%$ in 2018 compared to 2017 primarily due to an increase in net interest income, a decrease in the provision for loan losses and an decrease in the provision for taxes. The increase in net interest income was primarily due to an increase in funding income related to lending activities and an increase interest income from investment securities and funds sold resulting from an increase in associated yields partially offset by higher deposit funding costs. The Provision in this business segment represents the residual provision for credit losses to arrive at the total Provision for the Company. The decrease in noninterest income was primarily due to the sale of 90,000 Visa Class B shares amounting to $\$ 12.5$ million in the first quarter of 2017. Partially offsetting this was a $\$ 2.8$ million distribution from a low-income housing partnership in the first quarter of 2018. The provision for income taxes in this business segment represents the residual amount to arrive at the total tax expense for the Company. The overall effective tax rate decreased to $18.73 \%$ in 2018 compared to $31.11 \%$ in 2017.

Net income decreased by $\$ 4.2$ million or $27 \%$ in 2017 compared to 2016 primarily due to a decrease in net interest income, an increase in the provision for loan losses, and an increase in the provision for taxes. The decrease in net interest income was primarily due to higher deposit funding costs, partially offset by an increase in interest income from investment securities and funds sold under agreements to repurchase resulting from an increase in associated yields and an increase in funding income related to lending activities. The Provision in this business segment represents the residual provision for credit losses to arrive at the total Provision for the Company. The provision for income taxes in this business segment represents the residual amount to arrive at the total tax expense for the Company. The overall effective tax rate increased to $31.11 \%$ in 2017 compared to $30.10 \%$ in 2016 .

Other organizational units (Technology, Operations, Marketing, Human Resources, Finance, Credit and Risk Management, and Corporate and Regulatory Administration) included in Treasury and Other provide a wide range of support to the Company's other income earning segments. Expenses incurred by these support units are charged to the business segments through an internal cost allocation process.

## Analysis of Statements of Condition

## Investment Securities

Table 7 presents the maturity distribution at amortized cost, weighted-average yield to maturity, and fair value of our investment securities.

## Maturities and Average Yield on Securities

Table 7

| (dollars in millions) |  | $\begin{aligned} & 1 \text { Year } \\ & \text { or Less } \end{aligned}$ | Weighted Average Yield |  | After 1 Year-5 Years | Weighted <br> Average Yield |  | $\begin{gathered} \hline \text { After } 5 \\ \text { Years-10 } \\ \text { Years } \end{gathered}$ | Weighted Average Yield |  | $\begin{gathered} \hline \text { Over } \\ 10 \\ \text { Years } \end{gathered}$ | Weighted <br> Average Yield |  | Total | Weighted <br> Average Yield |  | Fair Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| As of December 31, 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Available-for-Sale |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt Securities Issued by the U.S. Treasury and Government Agencies ${ }^{2}$ | \$ | 0.8 | 2.6\% | \$ | 114.5 | 3.9\% | \$ | 279.2 | 2.7\% | \$ | - | -\% | \$ | 394.5 | 3.1\% | \$ | 392.4 |
| Debt Securities Issued by States and Political Subdivisions ${ }^{1}$ |  | 56.8 | 1.8 |  | 387.9 | 2.7 |  | 92.3 | 4.6 |  | 22.8 | 5.1 |  | 559.8 | 3.0 |  | 564.0 |
| Debt Securities Issued by U.S. Government-Sponsored Enterprises |  | - | - |  | 0.1 | 2.8 |  | - | - |  | - | - |  | 0.1 | 2.8 |  | 0.1 |
| Debt Securities Issued by Corporations |  | - | - |  | 225.0 | 3.3 |  | - | - |  | - | - |  | 225.0 | 3.3 |  | 223.1 |
| Mortgage-Backed Securities ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 5.0 | 3.1 |  | 100.9 | 3.0 |  | 83.7 | 3.3 |  | - | - |  | 189.6 | 3.1 |  | 190.4 |
| Residential - U.S. GovernmentSponsored Enterprises |  | - | - |  | 213.0 | 2.3 |  | 376.3 | 2.6 |  | - | - |  | 589.3 | 2.5 |  | 578.5 |
| Commercial - Government Agencies |  | - | - |  | 63.9 | 1.7 |  | - | - |  | - | - |  | 63.9 | 1.7 |  | 59.4 |
| Total Mortgage-Backed Securities |  | 5.0 | 3.1 |  | 377.8 | 2.4 |  | 460.0 | 2.8 |  | - | - |  | 842.8 | 2.6 |  | 828.3 |
| Total | \$ | 62.6 | 2.0\% | \$ | 1,105.3 | 2.8\% | \$ | 831.5 | 3.0\% | \$ | 22.8 | 5.1\% | \$ | 2,022.2 | 2.9\% | \$ | 2,007.9 |
| Held-to-Maturity |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt Securities Issued by the U.S. Treasury and Government Agencies ${ }^{2}$ | \$ | 154.7 | 1.9\% | \$ | 198.4 | 2.3\% | \$ | - | -\% | \$ | - | -\% | \$ | 353.1 | 2.1\% | \$ | 352.2 |
| Debt Securities Issued by States and Political Subdivisions ${ }^{1}$ |  | 10.2 | 2.4 |  | 110.7 | 3.4 |  | 106.0 | 5.0 |  | 7.7 | 5.2 |  | 234.6 | 4.1 |  | 240.8 |
| Debt Securities Issued by Corporations |  | - | - |  | 1.9 | 2.5 |  | 95.4 | 2.1 |  | - | - |  | 97.3 | 2.1 |  | 95.5 |
| Mortgage-Backed Securities ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 12.7 | 2.6 |  | 1,138.7 | 2.2 |  | 710.5 | 2.9 |  | - | - |  | 1,861.9 | 2.5 |  | 1,814.0 |
| Residential - U.S. GovernmentSponsored Enterprises |  | - | - |  | 295.9 | 2.1 |  | 462.9 | 2.7 |  | - | - |  | 758.8 | 2.5 |  | 740.2 |
| Commercial - Government Agencies |  | 8.2 | 3.4 |  | 161.9 | 2.8 |  | 6.3 | 4.0 |  | - | - |  | 176.4 | 2.9 |  | 171.4 |
| Total Mortgage-Backed Securities |  | 20.9 | 2.9 |  | 1,596.5 | 2.3 |  | 1,179.7 | 2.8 |  | - | - |  | 2,797.1 | 2.5 |  | 2,725.6 |
| Total | \$ | 185.8 | 2.0\% | \$ | 1,907.5 | 2.3\% | \$ | 1,381.1 | 2.9\% | \$ | 7.7 | 5.2\% | \$ | 3,482.1 | 2.6\% | \$ | 3,414.1 |
| Total Investment Securities |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| As of December 31, 2018 | \$ | 248.4 |  | \$ | 3,012.8 |  | \$ | 2,212.6 |  | \$ | 30.5 |  | \$ | 5,504.3 |  | \$ | 5,422.0 |
| As of December 31, 2017 | \$ | 384.3 |  | \$ | 3,655.1 |  | \$ | 2,074.3 |  | \$ | 50.6 |  | \$ | 6,164.3 |  | \$ | 6,127.1 |

1 Weighted-average yields on obligations of states and political subdivisions are generally tax-exempt and are computed on a taxable-equivalent basis using a federal statutory tax rate of $21 \%$.
Maturities for Small Business Administration debt securities and mortgage-backed securities anticipate future prepayments.
The carrying value of our investment securities portfolio was $\$ 5.5$ billion as of December 31, 2018, a decrease of $\$ 671.1$ million or $11 \%$ compared to December 31, 2017. As of December 31, 2018, our investment securities portfolio was comprised of securities with an average base duration of approximately 3.4 years.

We continually evaluate our investment securities portfolio in response to established asset/liability management objectives, changing market conditions that could affect profitability, and the level of interest rate risk to which we are exposed. These evaluations may cause us to change the level of funds we deploy into investment securities, change the composition of our investment securities portfolio, and change the proportion of investments made into the available-for-sale and held-to-maturity investment categories.

In 2018, we reduced our positions primarily in mortgage-backed securities, municipal debt securities, and corporate debt securities. We re-invested these proceeds primarily into higher yielding loan products. Ginnie Mae mortgage-backed securities continue to be the largest concentration in our portfolio. As of December 31, 2018, our portfolio of Ginnie Mae mortgage-backed securities was primarily comprised of securities issued in 2008 or later. As of December 31, 2018, these mortgage-backed securities were all AAA-rated, with a low probability of a change in their credit ratings in the near future. As of December 31, 2018, our available-for-sale investment securities portfolio was comprised of securities with an average base duration of approximately 2.3 years.

Gross unrealized gains in our investment securities portfolio were $\$ 21.2$ million as of December 31, 2018 and $\$ 36.6$ million as of December 31, 2017. Gross unrealized losses on our temporarily impaired investment securities were $\$ 103.5$ million as of December 31, 2018 and $\$ 73.9$ million as of December 31, 2017. The gross unrealized loss positions were primarily related to mortgage-backed securities issued by Ginnie Mae, Fannie Mae and Freddie Mac, and corporate debt securities. See Note 3 to the Consolidated Financial Statements for more information.

As of December 31, 2018, included in our investment securities portfolio were debt securities issued by political subdivisions within the State of Hawaii of $\$ 451.1$ million, representing $56 \%$ of the total fair value of the Company's municipal debt securities. Of the entire Hawaii municipal bond portfolio, $96 \%$ were credit-rated Aa2 or better by Moody's while the remaining Hawaii municipal bonds were credit-rated A1 or better by at least one nationally recognized statistical rating organization. Also, approximately $79 \%$ of the Company's Hawaii municipal bond holdings were general obligation issuances. As of December 31, 2018, there were no other holdings of municipal debt securities that were issued by a single state or political subdivision which comprised more than $10 \%$ of the total fair value of the Company's municipal debt securities.

The Company's corporate bond holdings as of December 31, 2018 had a fair value of $\$ 318.7$ million. Of this total, $\$ 95.5$ million or $30 \%$ was fully guaranteed by the Export-Import Bank of the United States, an agency of the U.S. government. Of the remaining $\$ 223.2$ million of corporate bonds, $49 \%$ were creditrated A or better by Standard \& Poor's while all of the remaining corporate bonds were credit-rated A- or better by at least one nationally recognized statistical rating organization.

## Loans and Leases

Table 8 presents the composition of our loan and lease portfolio by major categories.


[^2]Total loans and leases were $\$ 10.4$ billion as of December 31, 2018. This represents a $\$ 0.7$ billion or $7 \%$ increase from December 31, 2017 primarily due to growth in our consumer lending portfolio.

The commercial loan and lease portfolio is comprised of commercial and industrial loans, commercial mortgages, construction loans, and lease financing. Commercial and industrial loans are made primarily to corporations, middle market, and small businesses for the purpose of financing equipment acquisition, expansion, working capital, and other general business purposes. Commercial mortgages and construction loans are offered to real estate investors, developers, and builders primarily domiciled in Hawaii. Commercial mortgages are secured by first mortgages on commercial real estate at loan-to-value ratios generally not exceeding $75 \%$. The commercial properties are predominantly developments such as retail centers, apartments, industrial properties, and to a lesser extent, specialized properties such as hotels. The primary source of repayment for investor property is cash flow from the property and for owneroccupied property is the operating cash flow from the business. Construction loans are for the purchase or construction of a property for which repayment will be generated by the property. We classify loans as construction until the completion of the construction phase. Following construction, if a loan is retained, the loan is reclassified to the commercial mortgage category. Lease financing consists of direct financing leases and leveraged leases and are used by commercial customers to finance capital purchases. Although our primary market is Hawaii, the commercial portfolio contains loans to some borrowers based on the U.S. Mainland, including some Shared National Credits.

Commercial loans and leases were $\$ 4.0$ billion as of December 31, 2018, an increase of $\$ 213.3$ million or $6 \%$ from December 31, 2017. Commercial and industrial loans increased by $\$ 51.8$ million or $4 \%$ from December 31, 2017. Commercial mortgage loans increased by $\$ 198.4$ million or $9 \%$ from December 31, 2017 primarily due to continued demand from new and existing customers as the Hawaii economy continues to be strong. Construction loans decreased by $\$ 32.2$ million or $16 \%$ from December 31, 2017 primarily due to paydowns and successful completion of construction projects such as condominiums and low-income housing, partially offset by increased activity in our portfolio.

The consumer loan and lease portfolio is comprised of residential mortgage loans, home equity lines and loans, indirect auto loans and leases, and other consumer loans including personal credit lines, direct installment loans, and rewards-based consumer credit cards. These products are generally offered in the geographic markets we serve. Although we offer a variety of products, our residential mortgage loan portfolio is primarily comprised of fixed-rate loans concentrated in Hawaii. We also offer a variety of home equity lines and loans, usually secured by second mortgages on residential property of the borrower. Automobile lending activities include loans and leases secured by new or used automobiles. We originate automobile loans and leases on an indirect basis through selected dealerships. Direct installment loans are generally unsecured and are often used for personal expenses or for debt consolidation.

Consumer loans and leases were $\$ 6.5$ billion as of December 31, 2018, an increase of $\$ 438.5$ million or $7 \%$ from December 31, 2017. Residential mortgage loans increased by $\$ 207.0$ million or $6 \%$ from December 31, 2017 primarily due to a relatively constant level of loan originations combined with a slowdown in payoff activity. Automobile loans increased by $\$ 129.7$ million or $25 \%$ from December 31, 2017 primarily driven by steady automobile loan demand and competitive loan programs. Home equity lines and loans increased by $\$ 96.0$ million or $6 \%$ from December 31, 2017 as a result of continued loan demand in light of a healthy Hawaii economy and stable real estate market conditions. Additionally, utilization on new and existing home equity lines was strong during 2018.

See Note 4 to the Consolidated Financial Statements and the "Corporate Risk Profile - Credit Risk" section of MD\&A for more information on our loan and lease portfolio.

Table 9 presents the geographic distribution of our loan and lease portfolio.

| (dollars in thousands) | December 31, 2018 |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Hawaii |  | U.S. <br> Mainland ${ }^{1}$ |  | Guam |  | Other Pacific Islands |  | Foreign ${ }^{2}$ |  |  | Total |
| Commercial |  |  |  |  |  |  |  |  |  |  |  |  |
| Commercial and Industrial | \$ | 1,142,172 | \$ | 100,786 | \$ | 86,763 | \$ | 1,277 | \$ | 151 | \$ | 1,331,149 |
| Commercial Mortgage |  | 1,926,172 |  | 115,209 |  | 260,501 |  | 474 |  | - |  | 2,302,356 |
| Construction |  | 170,061 |  | - |  | - |  | - |  | - |  | 170,061 |
| Lease Financing |  | 61,813 |  | 109,933 |  | 786 |  | - |  | 3,694 |  | 176,226 |
| Total Commercial |  | 3,300,218 |  | 325,928 |  | 348,050 |  | 1,751 |  | 3,845 |  | 3,979,792 |
| Consumer |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential Mortgage |  | 3,596,908 |  | - |  | 75,373 |  | 1,515 |  | - |  | 3,673,796 |
| Home Equity |  | 1,643,529 |  | 161 |  | 36,571 |  | 1,181 |  | - |  | 1,681,442 |
| Automobile |  | 513,836 |  | - |  | 131,967 |  | 12,330 |  | - |  | 658,133 |
| Other ${ }^{3}$ |  | 372,767 |  | - |  | 53,992 |  | 28,852 |  | - |  | 455,611 |
| Total Consumer |  | 6,127,040 |  | 161 |  | 297,903 |  | 43,878 |  | - |  | 6,468,982 |
| Total Loans and Leases | \$ | 9,427,258 | \$ | 326,089 | \$ | 645,953 | \$ | 45,629 | \$ | 3,845 | \$ | 10,448,774 |
| Percentage of Total Loans and Leases |  | 90\% |  | 3\% |  | 6\% |  | 1\% |  | -\% |  | 100\% |

${ }^{1}$ For secured loans and leases, classification as U.S. Mainland is made based on where the collateral is located. For unsecured loans and leases, classification as U.S. Mainland is made based on the location where the majority of the borrower's business operations are conducted.
${ }^{2}$ Loans classified as Foreign represent those which are recorded in the Company's international business units.
${ }^{3}$ Comprised of other revolving credit, installment, and lease financing.
Our commercial and consumer lending activities are concentrated primarily in Hawaii and the Pacific Islands. Our commercial loan and lease portfolio to borrowers based on the U.S. Mainland includes leveraged lease financing and participation in Shared National Credits. Our consumer loan and lease portfolio includes limited lending activities on the U.S. Mainland.

Our Hawaii loan and lease portfolio increased by $\$ 499.5$ million or $6 \%$ from December 31, 2017, reflective of a healthy Hawaii economy.
Table 10 presents a maturity distribution for selected loan categories.

|  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  |  |  |  |

${ }^{1}$ Based on contractual maturities.
${ }^{2}$ As of December 31, 2018, loans maturing after one year consisted of $\$ 633.2$ million in variable rate loans and $\$ 473.8$ million in fixed rate loans.

## Goodwill

Goodwill was $\$ 31.5$ million as of December 31, 2018 and 2017. As of December 31, 2018, based on our qualitative assessment, there were no reporting units where we believed it was more likely than not that the fair value of a reporting unit was less than its carrying amount, including goodwill. As a result, we had no reporting units where there was a reasonable possibility of failing Step 1 of the goodwill impairment test. See Note 1 to the Consolidated Financial Statements for more information on our goodwill impairment policy.

## Other Assets

Other assets were $\$ 230.9$ million as of December 31, 2018, a decrease of $\$ 21.7$ million or $9 \%$ from December 31, 2017. This decrease was primarily due to a $\$ 30.3$ million decrease in accounts receivable, which was primarily due to a $\$ 20.0$ million decrease related to the settlement of a matured security coupled with a $\$ 16.4$ million early buy-out on an equipment lease in the first quarter of 2018 . These decreases were partially offset by a $\$ 7.8$ million increase in other assets. The fair value of our interest rate swap agreements increased by $\$ 3.6$ million, which is affected by prevailing interest rates. In addition, dealer advances increased by $\$ 3.3$ million. See Note 7 to the Consolidated Financial Statements for more information on the composition of our other assets.

## Deposits

Table 11 presents the components of our deposits by major customer categories as of December 31, 2018 and 2017.

| Deposits |  |
| :--- | ---: |
|  | Table 11 |
| (dollars in thousands) | December 31, |
| Consumer | $\mathbf{2 0 1 8}$ |
| Commercial | $\mathbf{2 0 1 7}$ |
| Public and Other | $\mathbf{7}, 726,731$ |
| Total Deposits | $\mathbf{\$}$ |

Total deposits were $\$ 15.0$ billion as of December 31, 2018, a $\$ 143.3$ million or $1 \%$ increase from December 31, 2017. This increase was primarily due to a $\$ 248.5$ million increase in consumer deposits due to an increase in time deposits and core deposits of $\$ 237.3$ million and $\$ 11.2$ million respectively. In addition, commercial deposits increased by $\$ 124.4$ million primarily due to a $\$ 95.1$ million increase in core deposits and a $\$ 29.3$ million increase in time deposits. These increases were partially offset by a $\$ 230.0$ million decrease in public and other deposits largely due to the strategic decision to reduce public time deposits.

Table 12 presents the components of our savings deposits as of December 31, 2018 and 2017.
$\qquad$

|  |  |  |  |
| :--- | ---: | ---: | ---: |
|  |  | December 31, |  |
| (dollars in thousands) | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 7}$ |  |
| Money Market | $\mathbf{1 , 9 7 3 , 9 7 9}$ | $\$$ | $1,827,090$ |
| Regular Savings | $3,565,220$ | $3,561,923$ |  |
| Total Savings Deposits | $\$$ | $5,539,199$ | $\$$ |

Table 13 presents the composition of our securities sold under agreements to repurchase.

| Securities Sold Under Agreements to Repurchase |  |  |
| :--- | ---: | ---: |
|  | Table 13 |  |
| (dollars in thousands) | December 31, |  |
| Private Institutions | $\mathbf{2 0 1 8}$ |  |
| Government Entities | 500,000 | $\$$ |
| Total Securities Sold Under Agreements to Repurchase | 500,000 |  |

Securities sold under agreements to repurchase as of December 31, 2018 remained relatively unchanged from December 31, 2017. As of December 31, 2018, the weighted-average maturity was 133 days for our repurchase agreements with government entities and 2.6 years for our repurchase agreements with private institutions. Some of our repurchase agreements with private institutions may be terminated at earlier specified dates by the private institution or in some cases by either the private institution or the Company. If all such agreements were to terminate at the earliest possible date, the weighted-average maturity for our repurchase agreements with private institutions would decrease to 2.0 years. As of December 31, 2018 and 2017 , the weighted-average interest rate for repurchase agreements with government entities was $1.19 \%$ and $0.61 \%$, respectively, while the weighted-average interest rate for repurchase agreements with private institutions as of December 31, 2018 and 2017 was $3.64 \%$, with all rates being fixed. Each of our repurchase agreements is accounted for as collateralized financing arrangements (i.e., a secured borrowing) and not as a sale and subsequent repurchase of securities. See Note 9 and 19 to the Consolidated Financial Statements for more information.

## Other Debt

Other debt was $\$ 135.6$ million as of December 31, 2018, a decrease of $\$ 125.1$ million or $48 \%$ from December 31, 2017. This decrease was primarily due to seven FHLB advances totaling $\$ 175.0$ million which matured during 2018. As of December 31, 2018, this balance was mainly comprised of $\$ 125.0$ million in FHLB advances with a weighted-average interest rate of $1.93 \%$ and maturity dates ranging from 2019 to 2020. These advances were primarily for asset/liability management purposes. As of December 31, 2018, our remaining line of credit with the FHLB was $\$ 2.2$ billion.

## Pension and Postretirement Plan Obligations

Retirement benefits payable were $\$ 40.5$ million as of December 31, 2018, an $\$ 3.2$ million or $9 \%$ increase from December 31, 2017. Our pension and postretirement benefit obligations and net periodic benefit cost are actuarially determined based on a number of key assumptions, including the discount rate, the expected return on plan assets, and the health-care cost trend rate. The accounting for pension and postretirement benefit plans reflect the long-term nature of the obligations and the investment horizon of the plan assets. The increase in retirement benefits payable was primarily due to a net investment loss on assets during the year.

The discount rate is used to determine the present value of future benefit obligations and the net periodic benefit cost. The discount rate used to value the present value of future benefit obligations as of each year-end is the rate used to estimate the net periodic benefit cost for the following year. Table 14 presents a sensitivity analysis of a 25 basis point change in discount rates to the pension and postretirement benefit plan's net periodic benefit cost and benefit obligations:

## Discount Rate Sensitivity Analysis

Table 14

| (dollars in thousands) | Base Discount Rate |  | Impact of |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Discount Rate 25 Basis Point Increase |  |  |  | Discount Rate 25 Basis Point Decrease |  |  |  |
|  | Pension Benefit | Postretirement Benefits |  | Pension Benefits | Postr |  |  | nsion nefits | Postr |  |
| 2018 Net Periodic Benefit Cost | 3.90\% | 3.96\% | \$ | 38 | \$ | (72) | \$ | (46) | \$ | 72 |
| Benefit Plan Obligations as of December 31, 2018 | 4.41\% | 4.48\% |  | $(2,501)$ |  | (714) |  | 2,563 |  | 736 |
| Estimated 2019 Net Periodic Benefit Cost | 4.41\% | 4.48\% |  | 31 |  | (66) |  | (38) |  | 66 |

See Note 14 to the Consolidated Financial Statements for more information on our pension and postretirement benefit plans.

## Foreign Activities

Cross-border outstandings are defined as loans (including accrued interest), acceptances, interest-bearing deposits with other banks, other interest-bearing investments, and any other monetary assets which are denominated in dollars or other non-local currency. As of December 31, 2018, 2017 and 2016, we did not have cross-border outstandings to any foreign country which exceeded $0.75 \%$ of our total assets.

## Corporate Risk Profile

Managing risk is an essential part of successfully operating our business. Management believes that the most prominent risk exposures for the Company are credit risk, market risk, liquidity risk management, capital management, and operational risk.

## Credit Risk

Credit risk is the risk that borrowers or counterparties will be unable or unwilling to repay their obligations in accordance with the underlying contractual terms. We manage and control credit risk in the loan and lease portfolio by adhering to well-defined underwriting criteria and account administration standards established by management. Written credit policies document underwriting standards, approval levels, exposure limits, and other limits or standards deemed necessary and prudent. Portfolio diversification at the obligor, industry, product, and/or geographic location levels is actively managed to mitigate concentration risk. In addition, credit risk management also includes an independent credit review process that assesses compliance with commercial and consumer credit policies, risk ratings, and other critical credit information. In addition to implementing risk management practices that are based upon established and sound lending practices, we adhere to sound credit principles. We understand and evaluate our customers' borrowing needs and capacity to repay, in conjunction with their character and history.

Commercial and industrial loans are made primarily for the purpose of financing equipment acquisition, expansion, working capital, and other general business purposes. Lease financing consists of direct financing leases and leveraged leases that are used by commercial customers to finance capital purchases ranging from computer equipment to transportation equipment. The credit decisions for these transactions are based upon an assessment of the overall financial capacity of the applicant. A determination is made as to the applicant's ability to repay in accordance with the proposed terms as well as an overall assessment of the risks involved. In addition to an evaluation of the applicant's financial condition, a determination is made of the probable adequacy of the primary and secondary sources of repayment, such as additional collateral or personal guarantees, to be relied upon in the transaction. Credit agency reports of the applicant's credit history supplement the analysis of the applicant's creditworthiness.

Commercial mortgages and construction loans are offered to real estate investors, developers, builders, and owner-occupants primarily domiciled in Hawaii. These loans are secured by first mortgages on real estate at loan-to-value ("LTV") ratios deemed appropriate based on the property type, location, overall quality, and sponsorship. Generally, these LTV ratios do not exceed $75 \%$. The commercial properties are predominantly developments such as retail centers, apartments, industrial properties and, to a lesser extent, more specialized properties such as hotels. Substantially our entire commercial mortgage loans are secured by properties located in our primary market area.

In the underwriting of our commercial mortgage loans, we obtain appraisals for the underlying properties. Decisions to lend are based on the economic fundamentals of the property and the creditworthiness of the borrower. In evaluating a proposed commercial mortgage loan, we primarily emphasize the ratio of the property's projected net cash flows to the loan's debt service requirement. The debt service coverage ratio normally is not less than $120 \%$ and it is computed after deducting for a vacancy factor and property expenses as appropriate. In addition, a personal guarantee of the loan or a portion thereof is sometimes required from the principal(s) of the borrower. We typically require title insurance insuring the priority of our lien, fire, and extended coverage casualty insurance, and flood insurance, if appropriate, in order to protect our security interest in the underlying property. In addition, business interruption insurance or other insurance may be required. Owner-occupant commercial mortgage loans are underwritten based upon the cash flow of the business provided that the real estate asset is utilized in the operation of the business. Real estate is evaluated independently as a secondary source of repayment. As noted above, LTV ratios generally do not exceed $75 \%$.

Construction loans are underwritten against projected cash flows derived from rental income, business income from an owner-occupant, or the sale of the property to an end-user. We may mitigate the risks associated with these types of loans by requiring fixed-price construction contracts, performance and payment bonding, controlled disbursements, and pre-sale contracts or pre-lease agreements.

We offer a variety of first mortgage and junior lien loans to consumers within our markets with residential home mortgages comprising our largest loan category. These loans are generally secured by a primary residence and are underwritten using traditional underwriting systems to assess the credit risks and financial capacity and repayment ability of the consumer. Decisions are primarily based on LTV ratios, debt-to-income ("DTI") ratios, liquidity, and credit scores. LTV ratios generally do not exceed $80 \%$, although higher levels are permitted with mortgage insurance. We offer variable rate mortgage loans with interest rates that are subject to change every year after the first, third, fifth, or seventh year, depending on the product and are based on the London Interbank Offered Rate ("LIBOR"). Variable rate mortgage loans are underwritten at fully-indexed interest rates. We do not offer payment-option facilities, sub-prime or Alt-A loans, or any product with negative amortization. We selectively offer interest-only mortgage loans to Private Banking clients."

Home equity loans are secured by both first and second liens on residential property of the borrower. The underwriting terms for the home equity product generally permits borrowing availability, in the aggregate, up to $85 \%$ of the value of the collateral property at the time of origination. We offer fixed and variable rate home equity loans, with variable rate loans underwritten at fully-indexed interest rates. Our procedures for underwriting home equity loans include an assessment of an applicant's overall financial capacity and repayment ability. Decisions are primarily based on LTV ratios, DTI ratios, and credit scores. Maximum amount and LTVs are determined by collateral value and channel.

Automobile lending activities include loans and leases secured by new or used automobiles. We originate automobile loans and leases on an indirect basis through selected dealerships in Hawaii, Guam and Saipan. Our procedures for underwriting automobile loans include an assessment of an applicant's overall financial capacity and repayment ability, credit history, and the ability to meet existing obligations and payments on the proposed loan. Although an applicant's creditworthiness is the primary consideration, the underwriting process also includes a comparison of the value of the collateral security to the proposed loan amount. We require borrowers to maintain full coverage automobile insurance on automobile loans and leases, with the Bank listed as either the loss payee or additional insured.

General economic conditions in Hawaii remained healthy during 2018, led by a strong tourism industry, relatively low unemployment, rising real estate prices, and an active construction industry. Our overall credit risk position reflects these positive economic trends and our loan portfolio growth and composition.

Non-Performing Assets and Accruing Loans and Leases Past Due 90 Days or More
Table 15 presents a five-year history of non-performing assets and accruing loans and leases past due 90 days or more.
Non-Performing Assets and Accruing Loans and Leases Past Due 90 Days or More
Table 15

| (dollars in thousands) | December 31, |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| Non-Performing Assets |  |  |  |  |  |  |  |  |  |  |
| Non-Accrual Loans and Leases |  |  |  |  |  |  |  |  |  |  |
| Commercial |  |  |  |  |  |  |  |  |  |  |
| Commercial and Industrial | \$ | 542 | \$ | 448 | \$ | 151 | \$ | 5,829 | \$ | 9,088 |
| Commercial Mortgage |  | 2,040 |  | 1,398 |  | 997 |  | 3,469 |  | 745 |
| Total Commercial |  | 2,582 |  | 1,846 |  | 1,148 |  | 9,298 |  | 9,833 |
| Consumer |  |  |  |  |  |  |  |  |  |  |
| Residential Mortgage |  | 5,321 |  | 9,243 |  | 13,780 |  | 14,598 |  | 14,841 |
| Home Equity |  | 3,671 |  | 3,991 |  | 3,147 |  | 4,081 |  | 3,097 |
| Total Consumer |  | 8,992 |  | 13,234 |  | 16,927 |  | 18,679 |  | 17,938 |
| Total Non-Accrual Loans and Leases |  | 11,574 |  | 15,080 |  | 18,075 |  | 27,977 |  | 27,771 |
| Foreclosed Real Estate |  | 1,356 |  | 1,040 |  | 1,686 |  | 824 |  | 2,311 |
| Total Non-Performing Assets | \$ | 12,930 | \$ | 16,120 | \$ | 19,761 | \$ | 28,801 | \$ | 30,082 |

Accruing Loans and Leases Past Due 90 Days or More
Commercial

| Commercial and Industrial | \$ | 10 | \$ | - | \$ | - | \$ | - | \$ | 2 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Commercial |  | 10 |  | - |  | - |  | - |  | 2 |
| Consumer |  |  |  |  |  |  |  |  |  |  |
| Residential Mortgage |  | 2,446 |  | 2,703 |  | 3,127 |  | 4,453 |  | 4,506 |
| Home Equity |  | 2,684 |  | 1,624 |  | 1,457 |  | 1,710 |  | 2,596 |
| Automobile |  | 513 |  | 886 |  | 894 |  | 315 |  | 616 |
| Other ${ }^{1}$ |  | 914 |  | 1,934 |  | 1,592 |  | 1,096 |  | 941 |
| Total Consumer |  | 6,557 |  | 7,147 |  | 7,070 |  | 7,574 |  | 8,659 |
| Total Accruing Loans and Leases Past Due 90 Days or More | \$ | 6,567 | \$ | 7,147 | \$ | 7,070 | \$ | 7,574 | \$ | 8,661 |
| Restructured Loans on Accrual Status and Not Past Due 90 Days or More | \$ | 48,731 | \$ | 55,672 | \$ | 52,208 | \$ | 49,430 | \$ | 45,474 |
| Total Loans and Leases | \$ | 10,448,774 | \$ | 9,796,947 | \$ | 8,949,785 | \$ | 7,878,985 | \$ | 6,897,589 |
| Ratio of Non-Accrual Loans and Leases to Total Loans and Leases |  | 0.11\% |  | 0.15\% |  | 0.20 \% |  | 0.36\% |  | 0.40\% |
| Ratio of Non-Performing Assets to Total Loans and Leases and Foreclosed Real Estate |  | 0.12 \% |  | 0.16\% |  | 0.22 \% |  | 0.37\% |  | 0.44\% |
| Ratio of Commercial Non-Performing Assets to Total Commercial Loans and Leases and Commercial Foreclosed Real Estate |  | 0.06\% |  | 0.05\% |  | 0.03\% |  | 0.29 \% |  | 0.38\% |
| Ratio of Consumer Non-Performing Assets to Total Consumer Loans and Leases and Consumer Foreclosed Real Estate |  | 0.16\% |  | 0.24\% |  | 0.35 \% |  | 0.41 \% |  | 0.47\% |
| Ratio of Non-Performing Assets and Accruing Loans and Leases Past Due 90 Days or More to Total Loans and Leases and Foreclosed Real Estate |  | 0.19\% |  | 0.24\% |  | 0.30\% |  | 0.46 \% |  | 0.56\% |

[^3]Table 16 presents the activity in Non-Performing Assets ("NPAs") for 2018:

| Non-Performing Assets (dollars in thousands) | Table $\mathbf{1 6}$ |
| :--- | ---: |
| Balance at Beginning of Year | 16,120 |
| Additions | 10,820 |
| Reductions | $(7,272)$ |
| Payments | $(3,421)$ |
| Return to Accrual Status | $(2,375)$ |
| Sales of Foreclosed Real Estate | $(942)$ |
| Charge-offs/Write-downs | $(14,010)$ |
| Total Reductions | $\$$ |
| Balance at End of Year | 12,930 |

NPAs consist of non-accrual loans and leases, and foreclosed real estate. Changes in the level of non-accrual loans and leases typically represent increases for loans and leases that reach a specified past due status, offset by reductions for loans and leases that are charged-off, paid down, sold, transferred to foreclosed real estate, or are no longer classified as non-accrual because they have returned to accrual status.

Total NPAs were $\$ 12.9$ million as of December 31, 2018, a decrease of $\$ 3.2$ million or $20 \%$ from December 31, 2017. The decrease was experienced primarily in the consumer lending portfolio. The ratio of our NPAs to total loans and leases, and foreclosed real estate was $0.12 \%$ as of December 31, 2018 and $0.16 \%$ as of December 31, 2017.

Commercial mortgage non-accrual loans increased by $\$ 0.6$ million or $46 \%$ from December 31, 2017 primarily due to the addition of one loan. Although three loans were removed, the one loan addition has an amount greater than the three loans combined. We have individually evaluated the two commercial mortgage non-accrual loans for impairment and have no cumulative net charge-offs.

Commercial and industrial non-accrual loans increased by $\$ 0.1$ million or $21 \%$ from December 31, 2017 due to the addition of two loans. We have evaluated the two borrowers for impairment and have recorded a $\$ 0.2$ million partial charge-off in 2018. As of December 31, 2018, the non-accrual balance in this category was comprised of six commercial borrowers.

The largest component of our NPAs continues to be residential mortgage loans. Residential mortgage non-accrual loans decreased by $\$ 3.9$ million or $42 \%$ from December 31, 2017 primarily due to paydowns and payoffs. In addition, three loans modified in a troubled debt restructuring ("TDR") were returned to accrual status. As of December 31, 2018, our residential mortgage non-accrual loans were comprised of 21 loans with a weighted average current LTV ratio of $57 \%$.

Foreclosed real estate represents property acquired as the result of borrower defaults on loans. Foreclosed real estate is recorded at fair value, less estimated selling costs, at the time of foreclosure. On an ongoing basis, properties are appraised as required by market conditions and applicable regulations. Foreclosed real estate increased by $\$ 0.3$ million or $30 \%$ from December 31, 2017 primarily due to the addition of two residential properties as of December 31, 2018.

## Loans and Leases Past Due 90 Days or More and Still Accruing Interest

Loans and leases in this category are 90 days or more past due, as to principal or interest, and are still accruing interest because they are well secured and in the process of collection. Loans and leases past due 90 days or more and still accruing interest were $\$ 6.6$ million as of December 31, 2018, a $\$ 0.6$ million or $8 \%$ decrease from December 31, 2017. This decrease was primarily in our other and automobile portfolios, which was offset by an increase in the home equity portfolio.

## Impaired Loans

Impaired loans are defined as loans for which we believe it is probable we will not collect all amounts due according to the contractual terms of the loan agreement. Included in impaired loans are all classes of commercial non-accruing loans (except lease financing and small business loans), all loans modified in a TDR (including accruing TDRs), and other loans where we believe that we will be unable to collect all amounts due according to the contractual terms of the loan agreement. Impaired loans exclude lease financing and smaller balance homogeneous loans (consumer and small business non-accruing loans) that are collectively evaluated for impairment. Impaired loans were $\$ 54.6$ million as of December 31, 2018 and $\$ 61.2$ million as of December 31, 2017, and had a related Allowance of $\$ 4.0$ million as of December 31, 2018 and $\$ 3.9$ million as of December 31, 2017. The change in impaired loans was primarily due to the decrease in impaired Commercial Mortgage, Commercial and Industrial, and Residential Mortgage loans, which was partially offset by the increase in impaired Automobile, and Home Equity loans. As of December 31, 2018, we recorded cumulative net charge-offs of $\$ 7.6$ million related to our total impaired loans. Our impaired loans are considered in management's assessment of the overall adequacy of the Allowance.

If interest due on the balances of all non-accrual loans as of December 31, 2018 had been accrued under the original terms, approximately $\$ 0.8$ million in total interest income would have been recorded in 2018, compared to less than $\$ 0.1$ million actually recorded as interest income on those loans.

## Loans Modified in a Troubled Debt Restructuring

Table 17 presents information on loans whose terms have been modified in a TDR:

| Loans Modified in a Troubled Debt Restructuring | Table 17 |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| (dollars in thousands) | December 31, |  |  |  |
|  | 2018 |  |  | 2017 |
| Commercial |  |  |  |  |
| Commercial and Industrial | \$ | 6,198 | \$ | 8,486 |
| Commercial Mortgage |  | 4,144 |  | 9,205 |
| Construction |  | 1,321 |  | 1,416 |
| Total Commercial |  | 11,663 |  | 19,107 |
| Consumer |  |  |  |  |
| Residential Mortgage |  | 19,753 |  | 21,581 |
| Home Equity |  | 3,359 |  | 1,965 |
| Automobile |  | 17,117 |  | 14,811 |
| Other ${ }^{1}$ |  | 2,098 |  | 2,645 |
| Total Consumer |  | 42,327 |  | 41,002 |
| Total | \$ | 53,990 | \$ | 60,109 |

${ }^{1}$ Comprised of other revolving credit and installment financing.
Loans modified in a TDR decreased by $\$ 6.1$ million from December 31, 2017. The decrease was primarily due to the full repayments of commercial mortgage loans during the second quarter of 2018. Residential mortgage loans remain our largest TDR loan class. As of December 31, 2018, $\$ 48.7$ million or $90 \%$ of loans modified in a TDR were performing in accordance with their modified contractual terms and were on accrual status.

Generally, loans modified in a TDR are returned to accrual status after the borrower has demonstrated performance under the modified terms by making at least six consecutive payments. See Note 4 to the Consolidated Financial Statements for a description of the modification programs that we currently offer to our customers.

Reserve for Credit Losses
The Company's reserve for credit losses is comprised of two components, the Allowance and the reserve for unfunded commitments (the "Unfunded Reserve"). Table 18 presents the activity in the Company's reserve for credit losses for the years ended December 31:

${ }^{1}$ Comprised of other revolving credit, installment, and lease financing.
${ }^{2}$ Included in this analysis is activity related to the Company's reserve for unfunded commitments, which is separately recorded in other liabilities in the consolidated statements of condition.

## Allowance for Loan and Lease Losses

Table 19 presents the allocation of the Allowance by loan and lease category.
Allocation of Allowance for Loan and Lease Losses
Table 19

| (dollars in thousands) | December 31, |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| Commercial |  |  |  |  |  |  |  |  |  |  |
| Commercial and Industrial | \$ | 26,408 | \$ | 24,750 | \$ | 22,797 | \$ | 22,052 | \$ | 26,822 |
| Commercial Mortgage |  | 34,869 |  | 34,890 |  | 33,893 |  | 31,889 |  | 31,118 |
| Construction |  | 4,398 |  | 5,109 |  | 7,771 |  | 5,541 |  | 4,927 |
| Lease Financing |  | 1,199 |  | 1,073 |  | 1,219 |  | 1,232 |  | 1,684 |
| Total Commercial |  | 66,874 |  | 65,822 |  | 65,680 |  | 60,714 |  | 64,551 |
| Consumer |  |  |  |  |  |  |  |  |  |  |
| Residential Mortgage |  | 6,870 |  | 6,515 |  | 6,435 |  | 11,151 |  | 14,069 |
| Home Equity |  | 11,240 |  | 12,520 |  | 13,442 |  | 13,118 |  | 14,798 |
| Automobile |  | 11,576 |  | 10,940 |  | 9,763 |  | 8,516 |  | 4,251 |
| Other ${ }^{1}$ |  | 10,133 |  | 11,549 |  | 8,953 |  | 9,381 |  | 11,019 |
| Total Consumer |  | 39,819 |  | 41,524 |  | 38,593 |  | 42,166 |  | 44,137 |
| Total Allocation of Allowance for Loan and Lease Losses | \$ | 106,693 | \$ | 107,346 | \$ | 104,273 | \$ | 102,880 | \$ | 108,688 |


|  | December 31, |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
|  | Alloc. <br> Allow. as <br> \% of loan or lease category | Loan category as \% of total loans and leases | Alloc. Allow. as \% of loan or lease category |  | Alloc. <br> Allow. as $\%$ of loan or lease category | Loan category as \% of total loans and leases | Alloc. <br> Allow. as \% of loan or lease category |  | Alloc. <br> Allow. as $\%$ of loan or lease category |  |
| Commercial |  |  |  |  |  |  |  |  |  |  |
| Commercial and Industrial | 1.98\% | 12.74\% | 1.93\% | 13.06\% | 1.82\% | 13.96\% | 1.98\% | 14.15\% | 2.54\% | 15.30\% |
| Commercial Mortgage | 1.51 | 22.03 | 1.66 | 21.48 | 1.79 | 21.11 | 1.90 | 21.29 | 2.16 | 20.84 |
| Construction | 2.59 | 1.63 | 2.53 | 2.06 | 2.88 | 3.02 | 3.54 | 1.99 | 4.51 | 1.58 |
| Lease Financing | 0.68 | 1.69 | 0.59 | 1.85 | 0.59 | 2.33 | 0.60 | 2.60 | 0.74 | 3.28 |
| Total Commercial | 1.68 | 38.09 | 1.75 | 38.45 | 1.82 | 40.42 | 1.93 | 40.03 | 2.28 | 41.00 |
| Consumer |  |  |  |  |  |  |  |  |  |  |
| Residential Mortgage | 0.19 | 35.16 | 0.19 | 35.39 | 0.20 | 35.34 | 0.38 | 37.13 | 0.55 | 37.28 |
| Home Equity | 0.67 | 16.09 | 0.79 | 16.18 | 1.01 | 14.91 | 1.23 | 13.57 | 1.71 | 12.56 |
| Automobile | 1.76 | 6.30 | 2.07 | 5.39 | 2.15 | 5.08 | 2.23 | 4.85 | 1.31 | 4.70 |
| Other ${ }^{1}$ | 2.22 | 4.36 | 2.57 | 4.59 | 2.35 | 4.25 | 2.69 | 4.42 | 3.58 | 4.46 |
| Total Consumer | 0.62 | 61.91 | 0.69 | 61.55 | 0.72 | 59.58 | 0.89 | 59.97 | 1.08 | 59.00 |
| Total | 1.02\% | 100.00\% | 1.10\% | 100.00\% | 1.17\% | 100.00\% | 1.31\% | 100.00\% | 1.58\% | 100.00\% |

${ }^{1}$ Comprised of other revolving credit, installment, and lease financing.
As of December 31, 2018, the Allowance was $\$ 106.7$ million or $1.02 \%$ of total loans and leases outstanding, compared with an Allowance of $\$ 107.3$ million or $1.10 \%$ of total loans and leases outstanding as of December 31, 2017. The level of the Allowance was commensurate with the Company's stable credit risk profile, loan portfolio growth and composition, and a healthy Hawaii economy.

Net charge-offs of loans and leases were $\$ 14.1$ million or $0.14 \%$ of total average loans and leases in 2018 compared to $\$ 13.8$ million or $0.15 \%$ of total average loans and leases in 2017. Net charge-offs in our consumer portfolios were $\$ 14.6$ million in 2018 compared to $\$ 13.9$ million in 2017. This increase was primarily reflected in our credit card portfolio, which was sold on November 1,2018 , our home equity portfolio due to lower recoveries, as well as overdrafts. Net recoveries in our commercial portfolios were $\$ 0.5$ million in 2018 compared to net recoveries of $\$ 0.1$ million in 2017.

Although we determine the amount of each component of the Allowance separately, the Allowance as a whole was considered appropriate by management as of December 31, 2018 based on our ongoing analysis of estimated probable credit losses, credit risk profiles, economic conditions, coverage ratios, and other relevant factors.

The allocation of the Allowance to our commercial portfolio segment increased by $\$ 1.1$ million or $2 \%$ from December 31, 2017. This increase was primarily due to a $\$ 1.7$ million increase in the Allowance allocated to the commercial and industrial portfolio due to loan growth. The increase was offset by a $\$ 0.7$ million decrease in the Allowance allocated to the construction portfolio due to the completion of major construction projects and the resultant decline in construction outstandings.

The allocation of the Allowance to our consumer portfolio segment decreased by $\$ 1.7$ million or $4 \%$ from December 31, 2017 and is consistent with current asset quality metrics and economic conditions.

See Note 4 to the Consolidated Financial Statements for more information on the Allowance and credit quality indicators.

## Reserve for Unfunded Commitments

The Unfunded Reserve was $\$ 6.8$ million as of December 31, 2018 and December 31, 2017. The process used to determine the Unfunded Reserve is consistent with the process for determining the Allowance, as adjusted for estimated funding probabilities.

## Other Credit Risks

In the normal course of business, we serve the needs of state and political subdivisions in multiple capacities, including traditional banking products such as deposit services, and by investing in municipal debt securities. The carrying value of our municipal debt securities was $\$ 798.6$ million as of December 31, 2018 and $\$ 865.5$ million as of December 31, 2017. We also maintained investments in corporate bonds with a carrying value of $\$ 320.4$ million as of December 31, 2018 and $\$ 385.7$ million as of December 31, 2017. We are exposed to credit risk in these investments should the issuer of a security be unable to meet its financial obligations. This may result in the issuer failing to make scheduled interest payments and/or being unable to repay the principal upon maturity. See the "Analysis of Statements of Condition - Investment Securities" section in MD\&A for more information.

Our use of derivative financial instruments has been very limited in recent years. However, these financial instruments do expose the Company to counterparty credit risk. See Note 17 to the Consolidated Financial Statements for more information.

## Market Risk

Market risk is the potential of loss arising from adverse changes in interest rates and prices. We are exposed to market risk as a consequence of the normal course of conducting our business activities. Our market risk management process involves measuring, monitoring, controlling, and mitigating risks that can significantly impact our statements of income and condition. In this management process, market risks are balanced with expected returns in an effort to enhance earnings performance while limiting volatility.

Our primary market risk exposure is interest rate risk.

## Interest Rate Risk

The objective of our interest rate risk management process is to maximize net interest income while operating within acceptable limits established for interest rate risk and maintaining adequate levels of funding and liquidity. The potential cash flows, sales, or replacement value of many of our assets and liabilities, especially those that earn or pay interest, are sensitive to changes in the general level of interest rates. This interest rate risk arises primarily from our core business activities of extending loans and accepting deposits. Our investment securities portfolio is also subject to significant interest rate risk.

Many factors affect our exposure to changes in interest rates, such as general economic and financial conditions, customer preferences, historical pricing relationships, and repricing characteristics of financial instruments. Our earnings are affected not only by general economic conditions but also by the monetary and fiscal policies of the U.S. and its agencies, particularly the Federal Reserve Bank (the "FRB"). The monetary policies of the FRB can influence the overall growth of loans, investment securities, and deposits and the level of interest rates earned on assets and paid for liabilities.

In managing interest rate risk, we, through the Asset/Liability Management Committee ("ALCO"), measure short and long-term sensitivities to changes in interest rates. The ALCO, which is comprised of members of executive management, utilizes several techniques to manage interest rate risk, which include:

- adjusting the statement of condition mix or altering the interest rate characteristics of assets and liabilities;
- changing product pricing strategies;
- modifying characteristics of the investment securities portfolio; and
- using derivative financial instruments.

Our use of derivative financial instruments, as detailed in Note 17 to the Consolidated Financial Statements, has generally been limited. This is due to natural on-balance sheet hedges arising out of offsetting interest rate exposures from loans and investment securities with deposits and other interest-bearing liabilities. In particular, the investment securities portfolio is utilized to manage the interest rate exposure and sensitivity to within the guidelines and limits established by the ALCO. We utilize natural and offsetting economic hedges in an effort to reduce the need to employ off-balance sheet derivative financial instruments to hedge interest rate risk exposures. Expected movements in interest rates are also considered in managing interest rate risk. Thus, as interest rates change, we may use different techniques to manage interest rate risk.

A key element in our ongoing process to measure and monitor interest rate risk is the utilization of an asset/liability simulation model that attempts to capture the dynamic nature of the statement of condition. The model is used to estimate and measure the statement of condition sensitivity to changes in interest rates. These estimates are based on assumptions about the behavior of loan and deposit pricing, repayment rates on mortgage-based assets, and principal amortization and maturities on other financial instruments. The model's analytics include the effects of standard prepayment options on mortgages and customer withdrawal options for deposits. While such assumptions are inherently uncertain, we believe that our assumptions are reasonable.

We utilize net interest income simulations to analyze short-term income sensitivities to changes in interest rates. Table 20 presents, for the twelve months subsequent to December 31, 2018 and 2017, an estimate of the change in net interest income that would result from a gradual and immediate change in interest rates, moving in a parallel fashion over the entire yield curve, relative to the measured base case scenario. The base case scenario assumes the statement of condition and interest rates are generally unchanged. Based on our net interest income simulation as of December 31, 2018, net interest income is expected to increase as interest rates rise. This is due in part to our strategy to maintain a relatively short investment portfolio duration. In addition, rising interest rates would drive higher rates on loans and investment securities, as well as induce a slower pace of premium amortization on certain securities within our investment portfolio. However, lower interest rates would likely cause a decline in net interest income as lower rates would lead to lower yields on loans and investment securities, as well as drive higher premium amortization on existing investment securities. Based on our net interest income simulation as of December 31, 2018, net interest income sensitivity to changes in interest rates for the twelve months subsequent to December 31, 2018 was slightly less sensitive in comparison to the sensitivity profile for the twelve months subsequent to December 31, 2017.

## Net Interest Income Sensitivity Profile

Table 20

| (dollars in thousands) | Impact on Future Annual Net Interest Income |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | December 31, 2018 |  |  | December 31, 2017 |  |  |
| Gradual Change in Interest Rates (basis points) |  |  |  |  |  |  |
| +200 | \$ | 11,014 | 2.2\% | \$ | 12,420 | 2.6\% |
| +100 |  | 5,673 | 1.1 |  | 6,622 | 1.4 |
| -100 |  | $(6,289)$ | (1.2) |  | $(6,789)$ | (1.4) |
| Immediate Change in Interest Rates (basis points) |  |  |  |  |  |  |
| +200 | \$ | 23,309 | 4.6\% | \$ | 29,876 | 6.2\% |
| +100 |  | 12,517 | 2.5 |  | 16,328 | 3.4 |
| -100 |  | $(17,665)$ | (3.5) |  | $(21,653)$ | (4.5) |

To analyze the impact of changes in interest rates in a more realistic manner, non-parallel interest rate scenarios are also simulated. These non-parallel interest rate scenarios indicate that net interest income may decrease from the base case scenario should the yield curve flatten or become inverted for a period of time. Conversely, if the yield curve were to steepen, net interest income may increase.

## Other Market Risks

In addition to interest rate risk, we are exposed to other forms of market risk in our normal business transactions. Foreign currency and foreign exchange contracts expose us to a small degree of foreign currency risk. These transactions are primarily executed on behalf of customers. Our trust and asset management income is at risk to fluctuations in the market values of underlying assets, particularly debt and equity securities. Also, our share-based compensation expense is dependent on the fair value of our stock options, restricted stock units, and restricted stock at the date of grant. The fair value of stock options, restricted stock units, and restricted stock is impacted by the market price of the Parent's common stock on the date of grant and is at risk to changes in equity markets, general economic conditions, and other factors.

## Liquidity Risk Management

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 offbalance 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. The ALCO monitors sources and uses of funds and modifies asset and liability positions as liquidity requirements change. This process, combined with our ability to raise funds in money and capital markets and through private placements, provides flexibility in managing the exposure to liquidity risk.

In an effort to satisfy our liquidity needs, we actively manage our assets and liabilities. We have access to immediate liquid resources in the form of cash which is primarily on deposit with the FRB. Potential sources of liquidity also include investment securities in our available-for-sale securities portfolio, our ability to sell loans in the secondary market, and to secure borrowings from the FRB and FHLB. Our held-to-maturity securities, while not intended for sale, may also be utilized in repurchase agreements to obtain funding. 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 FRB. As of December 31, 2018, we could have borrowed an additional $\$ 2.2$ billion from the FHLB and an additional $\$ 538.5$ million from the FRB based on the amount of collateral pledged.

We continued our focus on maintaining a strong liquidity position throughout 2018. As of December 31, 2018, cash and cash equivalents were $\$ 526.0$ million, the carrying value of our available-for-sale investment securities was $\$ 2.0$ billion, and total deposits were $\$ 15.0$ billion. As of December 31, 2018, our available-for-sale investment securities portfolio was comprised of securities with an average base duration of approximately 2.3 years.

## Capital Management

We actively manage capital, commensurate with our risk profile, in our efforts to enhance shareholder value. We also seek to maintain capital levels for the Company and the Bank at amounts in excess of the regulatory "well-capitalized" thresholds. Periodically, we may respond to market conditions by implementing changes to our overall balance sheet positioning to manage our capital position.

The Company and the Bank are each subject to regulatory capital requirements administered by the federal banking agencies. Failure to meet minimum capital requirements could cause certain mandatory and discretionary actions by regulators that, if undertaken, would likely have a material effect on our financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Company and the Bank must meet specific capital guidelines that involve quantitative and qualitative measures. These measures were established by regulation intended to ensure capital adequacy. As of December 31, 2018, the Company's capital levels remained characterized as "well-capitalized." The Company's regulatory capital ratios are presented in Table 21 below. There have been no conditions or events since December 31, 2018 that management believes have changed either the Company's or the Bank's capital classifications.

As of December 31, 2018, shareholders' equity was $\$ 1.3$ billion, an increase of $\$ 36.3$ million or 3\% from December 31, 2017. Earnings for 2018 of $\$ 219.6$ million, common stock issuances of $\$ 7.9$ million, and share-based compensation of $\$ 8.1$ million were offset by cash dividends paid of $\$ 98.5$ million, common stock repurchases of $\$ 92.0$ million, and other comprehensive loss of $\$ 8.9$ million. In 2018, included in the amount of common stock repurchased were $1,079,397$ shares repurchased under our share repurchase program. These shares were repurchased at an average cost per share of $\$ 81.80$ and a total cost of $\$ 88.3$ million. From the beginning of our share repurchase program in July 2001 through December 31, 2018, we repurchased a total of 55.3 million shares of common stock and returned total over $\$ 2.1$ billion to our shareholders at an average cost of $\$ 39.14$ per share.

In January 2019, the Parent's Board of Directors increased the authorization under the share repurchase program by an additional $\$ 130.0$ million. From January 1, 2019 through February 15, 2019, the Parent repurchased an additional 298,500 shares of common stock at an average cost of $\$ 75.46$ per share and a total cost of $\$ 22.5$ million. Remaining buyback authority was $\$ 139.2$ million as of February 15, 2019. The actual amount and timing of future share repurchases, if any, will depend on market and economic conditions, regulatory rules, applicable SEC rules, and various other factors.

In January 2019, the Parent's Board of Directors declared a quarterly cash dividend of $\$ 0.62$ per share on the Parent's outstanding shares. The dividend will be payable on March 14, 2019 to shareholders of record at the close of business on February 28, 2019.

Table 21 presents a five-year history of activities and balances in our capital accounts, along with key capital ratios.
Shareholders' Equity and Regulatory Capital
Table 21

| (dollars in thousands) | December 31, |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  | 2015 |  | 2014 |  |
| Change in Shareholders' Equity |  |  |  |  |  |  |  |  |  |  |
| Net Income | \$ | 219,602 | \$ | 184,672 | \$ | 181,461 | \$ | 160,704 | \$ | 163,042 |
| Cash Dividends Paid |  | $(98,496)$ |  | $(87,066)$ |  | $(81,157)$ |  | $(78,367)$ |  | $(79,660)$ |
| Dividend Reinvestment Program |  | 4,689 |  | 4,360 |  | 4,271 |  | 4,316 |  | 4,479 |
| Common Stock Repurchased |  | $(91,988)$ |  | $(47,076)$ |  | $(61,807)$ |  | $(52,981)$ |  | $(64,046)$ |
| Other ${ }^{1}$ |  | 2,525 |  | 15,441 |  | 2,509 |  | 27,502 |  | 19,295 |
| Increase in Shareholders' Equity | \$ | 36,332 | \$ | 70,331 | \$ | 45,277 | \$ | 61,174 | \$ | 43,110 |


| Regulatory Capital ${ }^{2}$ |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Shareholders' Equity | \$ | 1,268,200 | \$ | 1,231,868 | \$ | 1,161,537 | \$ | 1,116,260 | \$ | 1,055,086 |
| Less: Goodwill ${ }^{3}$ |  | 28,718 |  | 28,718 |  | 27,413 |  | 27,416 |  | 31,517 |
| Postretirement Benefit Liability Adjustments |  | $(36,010)$ |  | $(27,715)$ |  | $(28,892)$ |  | $(28,860)$ |  | $(34,115)$ |
| Net Unrealized Gains (Losses) on Investment Securities ${ }^{4}$ |  | $(15,033)$ |  | $(7,000)$ |  | $(5,014)$ |  | 5,304 |  | 15,984 |
| Other |  | (198) |  | (198) |  | (198) |  | (198) |  | 2,069 |
| Common Equity Tier 1 Capital |  | 1,290,723 |  | 1,238,063 |  | 1,168,228 |  | 1,112,598 |  | N/A |
| Tier 1 Capital |  | 1,290,723 |  | 1,238,063 |  | 1,168,228 |  | 1,112,598 |  | 1,039,631 |
| Allowable Reserve for Credit Losses |  | 113,515 |  | 114,168 |  | 110,300 |  | 99,647 |  | 88,785 |
| Total Regulatory Capital | \$ | 1,404,238 | \$ | 1,352,231 | \$ | 1,278,528 | \$ | 1,212,245 | \$ | 1,128,416 |
|  |  |  |  |  |  |  |  |  |  |  |
| Risk-Weighted Assets ${ }^{2}$ | \$ | 9,878,904 | \$ | 9,348,296 | \$ | 8,823,485 | \$ | 7,962,484 | \$ | 7,077,035 |

## Key Regulatory Capital Ratios ${ }^{2}$

| Common Equity Tier 1 Capital Ratio | $13.07 \%$ | $13.24 \%$ | $13.24 \%$ | $13.97 \%$ | 13.24 | 13.97 |
| :--- | :--- | :--- | :--- | :---: | :---: | :---: |
| Tier 1 Capital Ratio | 13.07 | 13.24 | 14.69 |  |  |  |
| Total Capital Ratio | 14.21 | 14.46 | 14.49 | 15.22 | 7.21 | 7.26 |
| Tier 1 Leverage Ratio | 7.60 | 7.26 | 7.13 |  |  |  |

 tax benefits.
${ }^{2}$ December 31, 2018, 2017, 2016, and 2015 calculated under Basel III rules, which became effective January 1, 2015.
${ }^{3}$ December 31, 2018, 2017, 2016, and 2015 calculated net of deferred tax liabilities.


## Regulatory Initiatives Affecting the Banking Industry

## Basel III

Under final FRB and FDIC approved rules implementing the Basel Committee on Banking Supervision's capital guidelines for U.S. banks minimum requirements increased for both the quantity and quality of capital held by the Company. The Basel III capital standards substantially revised the risk based capital requirements applicable to bank holding companies and their depository institution subsidiaries, including the definitions and the components of Tier 1 capital and Total Capital, the method of evaluating risk-weighted assets, institutions of a capital conservation buffer, and other matters affecting regulatory capital ratios. Strict eligibility criteria for regulatory capital instruments were also implemented under the rules.

The phase-in period for the final rules became effective for the Company on January 1, 2015, with full compliance with all of the final rules' requirements phased in over a multi-year schedule, to be fully implemented earlier this year on January 1, 2019. As of December 31, 2018, the Company's capital levels remained characterized as "well-capitalized" under the new rules.

Management continues to monitor regulatory developments and their potential impact to the Company's liquidity requirements.

## Stress Testing

Enactment of the Economic Growth, Regulatory Relief, and Consumer Protection Act in May 2018 significantly altered several provisions of the Dodd-Frank Act, including how stress tests are run. Bank holding companies with assets of less than $\$ 100$ billion, such as the Company, are no longer subject to company-run stress testing requirements in section 165(i)(2) of the Dodd-Frank Act, including publishing a summary of results. At this time, the Company continues to run internal stress tests as a component of our comprehensive risk management and capital planning process.

## Deposit Insurance Fund ("DIF") Assessment

In March 2016, the FDIC approved a final rule that imposes on banks with at least $\$ 10$ billion in assets, such as the Company, a surcharge of 4.5 cents per $\$ 100$ of their assessment base, after making certain adjustments. The surcharge became effective for the third quarter of 2016 and the FDIC estimated the surcharge would be imposed for approximately two years. The surcharge took effect at the same time that the regular FDIC insurance assessment rates for all banks declined under a rule adopted by the FDIC in 2011. The surcharge ended on September 30, 2018. A further reduction in assessment rates will occur if and when the FDIC's Deposit Insurance Fund Reserve Ratio reaches 2.0 percent.

## Operational Risk

Operational risk represents the risk of loss resulting from our operations, including, but not limited to, the risk of fraud by employees or persons outside the Company, errors relating to transaction processing and technology, failure to adhere to compliance requirements, and the risk of cyber attacks. We are also exposed to operational risk through our outsourcing arrangements, and the effect that changes in circumstances or capabilities of our outsourcing vendors can have on our ability to continue to perform operational functions necessary to our business. The risk of loss also includes the potential legal actions that could arise as a result of an operational deficiency or as a result of noncompliance with applicable regulatory standards, adverse business decisions or their implementation, and customer attrition due to potential negative publicity. Operational risk is inherent in all business activities, and management of this risk is important to the achievement of Company goals and objectives.

Our Operating Risk Committee (the "ORC") provides oversight and assesses the most significant operational risks facing the Company. We have developed a framework that provides for a centralized operating risk management function through the ORC, supplemented by business unit responsibility for managing operational risks specific to their business units. Our internal audit department also validates the system of internal controls through ongoing risk-based audit procedures and reports on the effectiveness of internal controls to executive management and the Audit and Risk Committee of the Board of Directors.

We continuously strive to strengthen our system of internal controls to improve the oversight of operational risk.
While our internal controls have been designed to minimize operational risks, there is no assurance that business disruption or operational losses will not occur. On an ongoing basis, management reassesses operational risks, implements appropriate process changes, and invests in enhancements to our systems of internal controls.

## Off-Balance Sheet Arrangements and Guarantees

## Off-Balance Sheet Arrangements

We hold interests in several unconsolidated variable interest entities ("VIEs"). These unconsolidated VIEs are primarily low-income housing partnerships and solar energy tax credit partnership investments. Variable interests are defined as contractual ownership or other interests in an entity that change with fluctuations in an entity's net asset value. The primary beneficiary consolidates the VIE. We have determined that the Company is not the primary beneficiary of these entities. As a result, we do not consolidate these VIEs. See discussion of our accounting policy related to VIEs in Note 1 to the Consolidated Financial Statements.

## Guarantees

We pool Federal Housing Administration ("FHA") insured and U.S. Department of Veterans Affairs ("VA") guaranteed residential mortgage loans for sale to Ginnie Mae. We also sell residential mortgage loans in the secondary market to Fannie Mae. The agreements under which we sell residential mortgage loans to Ginnie Mae or Fannie Mae and the insurance or guaranty agreements with the FHA and VA contain provisions that include various representations and warranties regarding the origination and characteristics of the residential mortgage loans. Although these loans are primarily sold on a non-recourse basis, we may be obligated to repurchase residential mortgage loans or reimburse the respective investor if it is found that required documents were not delivered or were defective.

We also service substantially all of the loans we sell to investors in the secondary market. Each agreement under which we act as servicer generally specifies a standard of responsibility for our actions and provides protection against expenses and liabilities incurred by us when acting in compliance with the respective servicing agreements. However, if we commit a material breach of obligations as servicer, we may be subject to various penalties which may include the repurchase of an affected loan or a reimbursement to the respective investor.

See discussion of our risks related to representation and warranty provisions as well as our risks related to residential mortgage loan servicing activities in Note 20 to the Consolidated Financial Statements.

## Contractual Obligations

Our contractual obligations as of December 31, 2018 were as follows:
Contractual Obligations ${ }^{1}$
Table 22

|  | Less Than One Year |  | 1-3 Years |  | 4-5 Years |  | After 5 Years |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (dollars in thousands) |  |  |  |  |  |  |  |  |  |  |
| Deposits with No Stated Maturity | \$ | 13,281,720 | \$ | - | \$ | - | \$ | - | \$ | 13,281,720 |
| Time Deposits |  | 1,441,580 |  | 235,422 |  | 60,916 |  | 7,604 |  | 1,745,522 |
| Securities Sold Under Agreements to Repurchase |  | 4,296 |  | 275,000 |  | 225,000 |  | - |  | 504,296 |
| Other Debt |  | 50,000 |  | 75,000 |  | - |  | - |  | 125,000 |
| Banker's Acceptances Outstanding |  | 51 |  | - |  | - |  | - |  | 51 |
| Capital Lease Obligations |  | 825 |  | 1,650 |  | 1,650 |  | 23,930 |  | 28,055 |
| Non-Cancelable Operating Leases |  | 12,455 |  | 22,291 |  | 19,898 |  | 104,877 |  | 159,521 |
| Purchase Obligations |  | 14,279 |  | 22,647 |  | 4,658 |  | 4,162 |  | 45,746 |
| Affordable Housing Commitments |  | 5,506 |  | 8,411 |  | 163 |  | 1,118 |  | 15,198 |
| Pension and Postretirement Benefit Contributions ${ }^{2}$ |  | 1,331 |  | 2,821 |  | 3,103 |  | 9,264 |  | 16,519 |
| Total Contractual Obligations | \$ | 14,812,043 | \$ | 643,242 | \$ | 315,388 | \$ | 150,955 | \$ | 15,921,628 |

[^4]Commitments to extend credit, standby letters of credit, and commercial letters of credit do not necessarily represent future cash requirements in that these commitments often expire without being drawn upon; therefore, these items are not included in the above table (see Note 20 to the Consolidated Financial Statements for more information). Our non-cancelable operating leases and capital lease obligations are primarily related to branch premises, equipment, and a portion of the Company's headquarters' building with lease terms extending through 2052. Purchase obligations arise from agreements to purchase goods or services that are enforceable and legally binding. Other contracts included in purchase obligations primarily consist of service agreements for various systems and applications supporting bank operations. Pension and postretirement benefit contributions represent the minimum expected contribution to the unfunded non-qualified pension plan and postretirement benefit plan. Actual contributions may differ from these estimates.

See discussion of credit, lease, and other contractual commitments in Note 20 to the Consolidated Financial Statements.

## Future Application of Accounting Pronouncements

See discussion of the expected impact of accounting pronouncements recently issued but that we have not adopted as of December 31, 2018 in Note 1 to the Consolidated Financial Statements.

## Selected Quarterly Consolidated Financial Data

Table 23 presents our selected quarterly financial data for 2018 and 2017.
Condensed Statements of Income
Table 23

| (dollars in thousands, except per share amounts) | Three Months Ended$2018$ |  |  |  |  |  |  |  | Three Months Ended$2017$ |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Dec 31 |  | Sep 30 |  | Jun 30 |  | Mar 31 |  | Dec 31 |  |  | Sep 30 |  | Jun 30 |  | Mar 31 |  |  |
| Interest Income | \$ | 143,018 | \$ | 139,424 | \$ | 135,585 | \$ | 132,146 |  | \$ | 131,613 | \$ | 128,761 | \$ | 123,568 | \$ | 119,852 |  |
| Interest Expense |  | 19,045 |  | 16,497 |  | 15,089 |  | 13,190 |  |  | 12,843 |  | 12,444 |  | 11,289 |  | 9,980 |  |
| Net Interest Income |  | 123,973 |  | 122,927 |  | 120,496 |  | 118,956 |  |  | 118,770 |  | 116,317 |  | 112,279 |  | 109,872 |  |
| Provision for Credit Losses |  | 2,000 |  | 3,800 |  | 3,500 |  | 4,125 |  |  | 4,250 |  | 4,000 |  | 4,250 |  | 4,400 |  |
| Investment Securities Gains (Losses), Net |  | (841) |  | (729) |  | $(1,702)$ |  | (666) |  |  | (617) |  | (566) |  | (520) |  | 12,133 |  |
| Noninterest Income |  | 42,949 |  | 42,211 |  | 43,000 |  | 44,701 |  |  | 42,472 |  | 42,976 |  | 45,756 |  | 43,783 |  |
| Noninterest Expense |  | 95,911 |  | 90,538 |  | 90,791 |  | 94,384 |  |  | 92,336 |  | 88,598 |  | 88,189 |  | 88,568 |  |
| Income Before Provision for Income Taxes |  | 68,170 |  | 70,071 |  | 67,503 |  | 64,482 |  |  | 64,039 |  | 66,129 |  | 65,076 |  | 72,820 |  |
| Provision for Income Taxes |  | 14,259 |  | 13,138 |  | 12,785 |  | 10,442 |  |  | 21,086 |  | 20,248 |  | 20,414 |  | 21,644 |  |
| Net Income | \$ | 53,911 | \$ | 56,933 | \$ | 54,718 | \$ | 54,040 |  | \$ | 42,953 | \$ | 45,881 | \$ | 44,662 | \$ | 51,176 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Per Common Share |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Basic Earnings Per Share | \$ | 1.30 | \$ | 1.37 | \$ | 1.31 | \$ | 1.29 |  | \$ | 1.02 | \$ | 1.09 | \$ | 1.05 | \$ | 1.21 |  |
| Diluted Earnings Per Share | \$ | 1.30 | \$ | 1.36 | \$ | 1.30 | \$ | 1.28 |  | \$ | 1.01 | \$ | 1.08 | \$ | 1.05 | \$ | 1.20 |  |
| Dividends Declared Per Share | \$ | 0.62 | \$ | 0.60 | \$ | 0.60 | \$ | 0.52 |  | \$ | 0.52 | \$ | 0.52 | \$ | 0.50 | \$ | 0.50 |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Performance Ratios |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net Income to Average Total Assets (ROA) |  | 1.26 | \% | 1.33 | \% | 1.30 | \% | 1.29 | \% |  | 1.00 | \% | 1.07 | \% | 1.09 | \% | 1.26 | \% |
| Net Income to Average Shareholders' Equity (ROE) |  | 17.05 |  | 18.06 |  | 17.68 |  | 17.74 |  |  | 13.85 |  | 14.89 |  | 14.87 |  | 17.63 |  |
| Efficiency Ratio ${ }^{1}$ |  | 57.75 |  | 55.07 |  | 56.12 |  | 57.91 |  |  | 57.49 |  | 55.82 |  | 55.99 |  | 53.42 |  |
| Net Interest Margin ${ }^{2}$ |  | 3.10 |  | 3.07 |  | 3.04 |  | 3.00 |  |  | 2.98 |  | 2.92 |  | 2.92 |  | 2.89 |  |

[^5]
## Fourth Quarter Results and Other Matters

## Net Income

Net income for the fourth quarter of 2018 was $\$ 53.9$ million, an increase of $\$ 11.0$ million or $26 \%$ compared to the fourth quarter of 2017. Diluted earnings per share were $\$ 1.30$ for the fourth quarter of 2018 , an increase of $\$ 0.29$ or $29 \%$ compared to the fourth quarter of 2017.

## Net Interest Income

Net interest income, on a taxable-equivalent basis, for the fourth quarter of 2018 was $\$ 125.2$ million, an increase of $\$ 3.7$ million or $3 \%$ compared to the fourth quarter of 2017. The increase was primarily due to the shift in the mix of our earning assets to loans, which generally have higher yields. Net interest margin was $3.10 \%$ for the fourth quarter of 2018 , an increase of 12 basis point compared to the fourth quarter of 2017, primarily due to our loans, which generally have higher yields than our investment securities, comprising a larger percentage of our earning assets compared to 2017. In addition, yields increased for our commercial loans and investment portfolio. Yields on our loan portfolios increased primarily due to higher yields on floating rate loans.

## Provision for Credit Losses

We recorded a Provision of $\$ 2.0$ million in the fourth quarter of 2018 compared to a Provision of $\$ 4.3$ million recorded in the fourth quarter of 2017, while recording net charge-offs of loans and leases of $\$ 4.0$ million and $\$ 3.8$ million in the fourth quarters of 2018 and 2017, respectively. The Provision recorded was based on our determination that the allowance for loan and lease losses should be $\$ 106.7$ million as of December 31, 2018.

## Noninterest Income

Noninterest income, other than net gains on sales of investment securities, was $\$ 42.9$ million in the fourth quarter of 2018, an increase of $\$ 0.5$ million or $1 \%$ compared to the fourth quarter of 2017. This increase was primarily due to fees, exchange, and other service charges of $\$ 0.6$ million in merchant income, which was recorded as a reduction of other noninterest expense in 2017. This accounting change was related to the 2018 adoption of the new revenue recognition accounting guidance. This increase was partially offset by a $\$ 0.4$ decrease in mortgage banking income. This decrease was primarily due to reduced sales and margins on sales of conforming saleable loans from current production and from our mortgage loan portfolio.

## Noninterest Expense

Noninterest expense was $\$ 95.9$ million in the fourth quarter of 2018 , an increase of $\$ 3.6$ million or $4 \%$ compared to the fourth quarter of 2017. Salaries and benefit expense increased by $\$ 3.2$ million primarily due to a $\$ 2.7$ million increase in expenses related to our self-insured medical plans, a $\$ 2.5$ million increase in merit and minimum wage increases, and a $\$ 1.0$ million increase in separation expense. These increases were partially offset by a $\$ 0.9$ million decrease in FDIC fees. In addition, during fourth quarter 2017 a one-time $\$ 2.2$ million holiday bonus, inclusive of payroll taxes was paid.

## Provision for Income Taxes

The provision for income taxes was $\$ 14.3$ million in the fourth quarter of 2018, a decrease of $\$ 6.8$ million or $32 \%$ compared to the fourth quarter of 2017. The effective tax rate for the fourth quarter of 2018 was $20.92 \%$ compared with an effective tax rate of $32.93 \%$ for the fourth quarter of 2017. The lower effective rate in the fourth quarter of 2018 compared to the same period of 2017 was primarily due to the federal corporate tax rate changing from $35 \%$ to $21 \%$ as a result of the passage of the Tax Act, which was signed into law on December 22, 2017.

## Common Stock Repurchase Program

In the fourth quarter of 2018, we repurchased 325,377 shares of our common stock under our share repurchase program at an average cost per share of $\$ 76.63$ and a total cost of $\$ 24.9$ million. See Note 11 to the Consolidated Financial Statements for more information related to our common stock repurchase program.

## Item 7A. Quantitative and Qualitative Disclosures About Market Risk

See the Market Risk section in Management's Discussion and Analysis of Financial Condition and Results of Operation included in Item 7 of this report.

## Item 8. Financial Statements and Supplementary Data

## Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Bank of Hawaii Corporation

## Opinion on the Financial Statements

We have audited the accompanying consolidated statements of condition of Bank of Hawaii Corporation and subsidiaries (the "Company") as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated March 1, 2019 expressed an unqualified opinion thereon.

## Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits 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. We believe that our audits provide a reasonable basis for our opinion.
/s/ Ernst \& Young LLP
We have served as the Company's auditor since 1971.
Honolulu, Hawaii
March 1, 2019

Table of Contents

Bank of Hawaii Corporation and Subsidiaries Consolidated Statements of Income

| (dollars in thousands, except per share amounts) | Year Ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  |
| Interest Income |  |  |  |  |  |  |
| Interest and Fees on Loans and Leases | \$ | 410,597 | \$ | 370,441 | \$ | 333,239 |
| Income on Investment Securities |  |  |  |  |  |  |
| Available-for-Sale |  | 50,152 |  | 46,772 |  | 41,892 |
| Held-to-Maturity |  | 84,310 |  | 81,740 |  | 79,087 |
| Deposits |  | 34 |  | 15 |  | 9 |
| Funds Sold |  | 3,723 |  | 3,882 |  | 2,861 |
| Other |  | 1,357 |  | 944 |  | 812 |
| Total Interest Income |  | 550,173 |  | 503,794 |  | 457,900 |
| Interest Expense |  |  |  |  |  |  |
| Deposits |  | 41,143 |  | 22,332 |  | 12,647 |
| Securities Sold Under Agreements to Repurchase |  | 18,519 |  | 19,592 |  | 23,406 |
| Funds Purchased |  | 609 |  | 123 |  | 12 |
| Short-Term Borrowings |  | 145 |  | 64 |  | - |
| Other Debt |  | 3,405 |  | 4,445 |  | 4,256 |
| Total Interest Expense |  | 63,821 |  | 46,556 |  | 40,321 |
| Net Interest Income |  | 486,352 |  | 457,238 |  | 417,579 |
| Provision for Credit Losses |  | 13,425 |  | 16,900 |  | 4,750 |
| Net Interest Income After Provision for Credit Losses |  | 472,927 |  | 440,338 |  | 412,829 |
| Noninterest Income |  |  |  |  |  |  |
| Trust and Asset Management |  | 43,877 |  | 45,430 |  | 46,203 |
| Mortgage Banking |  | 8,437 |  | 12,949 |  | 19,895 |
| Service Charges on Deposit Accounts |  | 28,811 |  | 32,575 |  | 33,654 |
| Fees, Exchange, and Other Service Charges |  | 57,482 |  | 54,845 |  | 55,176 |
| Investment Securities Gains (Losses), Net |  | $(3,938)$ |  | 10,430 |  | 10,203 |
| Annuity and Insurance |  | 5,822 |  | 6,858 |  | 7,017 |
| Bank-Owned Life Insurance |  | 7,199 |  | 6,517 |  | 6,561 |
| Other |  | 21,233 |  | 15,813 |  | 18,634 |
| Total Noninterest Income |  | 168,923 |  | 185,417 |  | 197,343 |
| Noninterest Expense |  |  |  |  |  |  |
| Salaries and Benefits |  | 213,208 |  | 203,729 |  | 199,353 |
| Net Occupancy |  | 34,742 |  | 32,536 |  | 30,252 |
| Net Equipment |  | 23,852 |  | 22,078 |  | 20,578 |
| Data Processing |  | 17,846 |  | 15,483 |  | 15,208 |
| Professional Fees |  | 9,992 |  | 11,681 |  | 10,072 |
| FDIC Insurance |  | 7,732 |  | 8,666 |  | 8,615 |
| Other |  | 64,252 |  | 63,518 |  | 66,500 |
| Total Noninterest Expense |  | 371,624 |  | 357,691 |  | 350,578 |
| Income Before Provision for Income Taxes |  | 270,226 |  | 268,064 |  | 259,594 |
| Provision for Income Taxes |  | 50,624 |  | 83,392 |  | 78,133 |
| Net Income | \$ | 219,602 | \$ | 184,672 | \$ | 181,461 |
| Basic Earnings Per Share | \$ | 5.26 | \$ | 4.37 | \$ | 4.26 |
| Diluted Earnings Per Share | \$ | 5.23 | \$ | 4.33 | \$ | 4.23 |
| Dividends Declared Per Share | \$ | 2.34 | \$ | 2.04 | \$ | 1.89 |
| Basic Weighted Average Shares |  | 41,714,770 |  | 42,280,931 |  | 42,644,100 |
| Diluted Weighted Average Shares |  | 41,999,399 |  | 42,607,057 |  | 42,879,783 |

## Bank of Hawaii Corporation and Subsidiaries

Consolidated Statements of Comprehensive Income

| (dollars in thousands) | Year Ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  |  | 2017 |  | 2016 |
| Net Income | \$ | 219,602 | \$ | 184,672 | \$ | 181,461 |
| Other Comprehensive Loss, Net of Tax: |  |  |  |  |  |  |
| Net Unrealized Losses on Investment Securities |  | $(6,525)$ |  | $(1,986)$ |  | $(10,318)$ |
| Defined Benefit Plans |  | $(2,326)$ |  | 1,177 |  | (31) |
| Other Comprehensive Loss |  | $(8,851)$ |  | (809) |  | $(10,349)$ |
| Comprehensive Income | \$ | 210,751 | \$ | 183,863 | \$ | 171,112 |

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

Bank of Hawaii Corporation and Subsidiaries
Consolidated Statements of Condition

| (dollars in thousands) | December 31, 2018 |  |  | December 31, 2017 |
| :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |
| Interest-Bearing Deposits in Other Banks | \$ | 3,028 | \$ | 3,421 |
| Funds Sold |  | 198,860 |  | 181,413 |
| Investment Securities |  |  |  |  |
| Available-for-Sale |  | 2,007,942 |  | 2,232,979 |
| Held-to-Maturity (Fair Value of \$3,413,994 and \$3,894,121) |  | 3,482,092 |  | 3,928,170 |
| Loans Held for Sale |  | 10,987 |  | 19,231 |
| Loans and Leases |  | 10,448,774 |  | 9,796,947 |
| Allowance for Loan and Lease Losses |  | $(106,693)$ |  | $(107,346)$ |
| Net Loans and Leases |  | 10,342,081 |  | 9,689,601 |
| Total Earning Assets |  | 16,044,990 |  | 16,054,815 |
| Cash and Due From Banks |  | 324,081 |  | 263,017 |
| Premises and Equipment, Net |  | 151,837 |  | 130,926 |
| Accrued Interest Receivable |  | 51,230 |  | 50,485 |
| Foreclosed Real Estate |  | 1,356 |  | 1,040 |
| Mortgage Servicing Rights |  | 24,310 |  | 24,622 |
| Goodwill |  | 31,517 |  | 31,517 |
| Bank-Owned Life Insurance |  | 283,771 |  | 280,034 |
| Other Assets |  | 230,882 |  | 252,596 |
| Total Assets | \$ | 17,143,974 | \$ | 17,089,052 |

## Liabilities

| Deposits |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Noninterest-Bearing Demand | \$ | 4,739,596 | \$ | 4,724,300 |
| Interest-Bearing Demand |  | 3,002,925 |  | 3,082,563 |
| Savings |  | 5,539,199 |  | 5,389,013 |
| Time |  | 1,745,522 |  | 1,688,092 |
| Total Deposits |  | 15,027,242 |  | 14,883,968 |
| Short-Term Borrowings |  | 199 |  | - |
| Securities Sold Under Agreements to Repurchase |  | 504,296 |  | 505,293 |
| Other Debt |  | 135,643 |  | 260,716 |
| Retirement Benefits Payable |  | 40,494 |  | 37,312 |
| Accrued Interest Payable |  | 8,253 |  | 6,946 |
| Taxes Payable and Deferred Taxes |  | 19,736 |  | 24,009 |
| Other Liabilities |  | 139,911 |  | 138,940 |
| Total Liabilities |  | 15,875,774 |  | 15,857,184 |
| Commitments, Contingencies, and Guarantees (Note 20) |  |  |  |  |
| Shareholders' Equity |  |  |  |  |
| Common Stock (\$. 01 par value; authorized $500,000,000$ shares; <br> issued / outstanding: December 31, 2018 - 58,063,689 / 41,499,898 <br> and December 31, 2017 - 57,959,074 / 42,401,443) |  |  |  |  |
| Capital Surplus |  | 571,704 |  | 561,161 |
| Accumulated Other Comprehensive Loss |  | $(51,043)$ |  | $(34,715)$ |
| Retained Earnings |  | 1,641,314 |  | 1,512,218 |
| Treasury Stock, at Cost (Shares: December 31, 2018 -16,563,791 and December 31, 2017 - 15,557,631) |  | $(894,352)$ |  | $(807,372)$ |
| Total Shareholders' Equity |  | 1,268,200 |  | 1,231,868 |
| Total Liabilities and Shareholders' Equity | \$ | 17,143,974 | \$ | 17,089,052 |

Bank of Hawaii Corporation and Subsidiaries Consolidated Statements of Shareholders' Equity

| (dollars in thousands except share amounts) | $\begin{array}{r} \text { Common } \\ \text { Shares } \\ \text { Outstanding } \end{array}$ |  | Common Stock |  | Capital Surplus |  | Accum. <br> Other Comprehensive Income (Loss) |  | Retained <br> Earnings |  | Treasury Stock |  | Total |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance as of December 31, 2015 | 43,282,153 | \$ | 575 | \$ | 542,041 | \$ | $(23,557)$ | \$ | 1,316,260 | \$ | $(719,059)$ |  | \$ 1,116,260 |
| Net Income | - |  | - |  | - |  | - |  | 181,461 |  | - |  | 181,461 |
| Other Comprehensive Loss | - |  | - |  | - |  | $(10,349)$ |  | - |  | - |  | $(10,349)$ |
| Share-Based Compensation | - |  | - |  | 6,786 |  | - |  | - |  | - |  | 6,786 |
| Common Stock Issued under Purchase and Equity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Compensation Plans and Related Tax Benefits | 259,985 |  | 1 |  | 2,801 |  | - |  | $(1,124)$ |  | 8,665 |  | 10,343 |
| Common Stock Repurchased | $(906,160)$ |  | - |  | - |  | - |  | - |  | $(61,807)$ |  | $(61,807)$ |
| Cash Dividends Declared (\$1.89 per share) | - |  | - |  | - |  | - |  | $(81,157)$ |  | - |  | $(81,157)$ |
| Balance as of December 31, 2016 | 42,635,978 | \$ | 576 | \$ | 551,628 | \$ | $(33,906)$ | \$ | 1,415,440 | \$ | $(772,201)$ |  | \$ 1,161,537 |
| Net Income | - |  | - |  | - |  | - |  | 184,672 |  | - |  | 184,672 |
| Other Comprehensive Loss | - |  | - |  | - |  | (809) |  | - |  | - |  | (809) |
| Share-Based Compensation | - |  | - |  | 7,369 |  | - |  | - |  | - |  | 7,369 |
| Common Stock Issued under Purchase and Equity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Compensation Plans and Related Tax Benefits | 337,091 |  | - |  | 2,164 |  | - |  | (828) |  | 11,905 |  | 13,241 |
| Common Stock Repurchased | $(571,626)$ |  | - |  | - |  | - |  | - |  | $(47,076)$ |  | $(47,076)$ |
| Cash Dividends Declared (\$2.04 per share) | - |  | - |  | - |  | - |  | $(87,066)$ |  | - |  | $(87,066)$ |
| Balance as of December 31, 2017 | 42,401,443 | \$ | 576 | \$ | 561,161 | \$ | $(34,715)$ | \$ | 1,512,218 | \$ | $(807,372)$ |  | \$ 1,231,868 |
| Net Income | - |  | - |  | - |  | - |  | 219,602 |  | - |  | 219,602 |
| Other Comprehensive Loss | - |  | - |  | - |  | $(8,851)$ |  | - |  | - |  | $(8,851)$ |
| Reclassification of the Income Tax Effects of the |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Tax Cuts and Jobs Act from AOCI | - |  | - |  | - |  | $(7,477)$ |  | 7,477 |  | - |  | - |
| Share-Based Compensation | - |  | - |  | 8,146 |  | - |  | - |  | - |  | 8,146 |
| Common Stock Issued under Purchase and Equity |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Compensation Plans and Related Tax Benefits | 219,210 |  | 1 |  | 2,397 |  | - |  | 513 |  | 5,008 |  | 7,919 |
| Common Stock Repurchased | $(1,120,755)$ |  | - |  | - |  | - |  | - |  | $(91,988)$ |  | $(91,988)$ |
| Cash Dividends Declared (\$2.34 per share) | - |  | - |  | - |  | - |  | $(98,496)$ |  | - |  | $(98,496)$ |
| Balance as of December 31, 2018 | 41,499,898 | \$ | 577 | \$ | 571,704 | \$ | $(51,043)$ | \$ | 1,641,314 | \$ | $(894,352)$ |  | \$ 1,268,200 |

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

Bank of Hawaii Corporation and Subsidiaries Consolidated Statements of Cash Flows

| (dollars in thousands) | Year Ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  |
| Operating Activities |  |  |  |  |  |  |
| Net Income | \$ | 219,602 | \$ | 184,672 | \$ | 181,461 |
| Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities: |  |  |  |  |  |  |
| Provision for Credit Losses |  | 13,425 |  | 16,900 |  | 4,750 |
| Depreciation and Amortization |  | 14,389 |  | 13,048 |  | 12,871 |
| Amortization of Deferred Loan and Lease Fees |  | (372) |  | $(1,031)$ |  | $(1,467)$ |
| Amortization and Accretion of Premiums/Discounts on Investment Securities, Net |  | 32,966 |  | 39,186 |  | 43,728 |
| Share-Based Compensation |  | 8,146 |  | 7,369 |  | 6,786 |
| Benefit Plan Contributions |  | $(1,749)$ |  | $(11,454)$ |  | $(1,284)$ |
| Deferred Income Taxes |  | $(6,274)$ |  | 4,177 |  | 7,187 |
| Net Gains on Sales of Loans and Leases |  | $(3,834)$ |  | $(6,780)$ |  | $(11,113)$ |
| Net (Gains) Losses on Investment Securities |  | 3,938 |  | $(10,430)$ |  | $(10,203)$ |
| Proceeds from Sales of Loans Held for Sale |  | 275,943 |  | 323,784 |  | 273,597 |
| Originations of Loans Held for Sale |  | $(267,066)$ |  | $(326,195)$ |  | $(280,391)$ |
| Net Tax Benefits from Share-Based Compensation |  | 993 |  | 2,521 |  | - |
| Excess Tax Benefits from Share-Based Compensation |  | - |  | - |  | $(1,153)$ |
| Net Change in Other Assets and Other Liabilities |  | 27,815 |  | $(60,622)$ |  | 1,760 |
| Net Cash Provided by Operating Activities |  | 317,922 |  | 175,145 |  | 226,529 |

## Investing Activities

| Proceeds from Sales, Prepayments and Maturities | 358,244 | 365,239 | 408,835 |
| :---: | :---: | :---: | :---: |
| Purchases | $(166,915)$ | $(427,061)$ | $(367,346)$ |
| Investment Securities Held-to-Maturity: |  |  |  |
| Proceeds from Prepayments and Maturities | 853,635 | 882,748 | 806,339 |
| Purchases | $(419,640)$ | $(995,076)$ | $(677,652)$ |
| Net Change in Loans and Leases | $(664,692)$ | $(954,984)$ | $(1,263,749)$ |
| Proceeds from Sales of Loans | - | 137,717 | 147,898 |
| Premises and Equipment, Net | $(35,300)$ | $(30,470)$ | $(15,177)$ |
| Net Cash Used in Investing Activities | $(74,668)$ | $(1,021,887)$ | $(960,852)$ |

## Financing Activities

| Net Change in Deposits | 143,273 |  |  | 563,728 |  | 1,069,137 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Net Change in Short-Term Borrowings | (798) |  |  | $(27,701)$ |  | $(103,196)$ |
| Proceeds from Other Debt | 50,000 |  |  | - |  | 75,000 |
| Repayments of Other Debt | $(175,000)$ |  |  | - |  | $(50,000)$ |
| Excess Tax Benefits from Share-Based Compensation | - |  |  | - |  | 1,153 |
| Proceeds from Issuance of Common Stock | 7,873 |  |  | 13,101 |  | 9,079 |
| Repurchase of Common Stock | $(91,988)$ |  |  | $(47,076)$ |  | $(61,807)$ |
| Cash Dividends Paid | $(98,496)$ |  |  | $(87,066)$ |  | $(81,157)$ |
| Net Cash Provided by (Used in) Financing Activities | $(165,136)$ |  |  | 414,986 |  | 858,209 |
|  |  |  |  |  |  |  |
| Net Change in Cash and Cash Equivalents | 78,118 |  |  | $(431,756)$ |  | 123,886 |
| Cash and Cash Equivalents at Beginning of Period | 447,851 |  |  | 879,607 |  | 755,721 |
| Cash and Cash Equivalents at End of Period | \$ | 525,969 | \$ | 447,851 | \$ | 879,607 |
| Supplemental Information |  |  |  |  |  |  |
| Cash Paid for Interest | \$ | 62,515 | \$ | 44,945 | \$ | 39,482 |
| Cash Paid for Income Taxes |  | 42,475 |  | 67,883 |  | 57,005 |
| Non-Cash Investing and Financing Activities: |  |  |  |  |  |  |
| Transfer from Loans to Foreclosed Real Estate |  | 2,693 |  | 2,559 |  | 1,058 |
| Transfers from Loans to Loans Held for Sale |  | - |  | 86,625 |  | 189,972 |

## Note 1. Summary of Significant Accounting Policies

## Basis of Presentation

Bank of Hawaii Corporation (the "Parent") is a Delaware corporation and a bank holding company headquartered in Honolulu, Hawaii. Bank of Hawaii Corporation and its subsidiaries (collectively, the "Company") provide a broad range of financial products and services to customers in Hawaii, Guam, and other Pacific Islands. The majority of the Company's operations consist of customary commercial and consumer banking services including, but not limited to, lending, leasing, deposit services, trust and investment activities, brokerage services, and trade financing.

The accounting and reporting principles of the Company conform to U.S. generally accepted accounting principles ("GAAP") and prevailing practices within the financial services industry. The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts in the financial statements and accompanying notes. Actual results may differ from those estimates and such differences could be material to the financial statements.

Certain prior period information has been reclassified to conform to the current year presentation.
The following is a summary of the Company's significant accounting policies:

## Consolidation

The accompanying consolidated financial statements include the accounts of the Parent and its subsidiaries. The Parent's principal operating subsidiary is Bank of Hawaii (the "Bank"). All significant intercompany accounts and transactions have been eliminated in consolidation.

## Variable Interest Entities

Variable interests are defined as contractual ownership or other interests in an entity that change with fluctuations in an entity's net asset value. The primary beneficiary consolidates the variable interest entity ("VIE"). The primary beneficiary is defined as the enterprise that has both the power to direct the activities of the VIE that most significantly impact the entity's economic performance and the obligation to absorb losses or the right to receive benefits that could be significant to the VIE.

The Company has limited partnership interests in several low-income housing partnerships. These partnerships provide funds for the construction and operation of apartment complexes that provide affordable housing to lower-income households. If these developments successfully attract a specified percentage of residents falling in that lower income range, state and/or federal income tax credits are made available to the partners. The tax credits are generally recognized over 10 years. In order to continue receiving the tax credits each year over the life of the partnership, the low-income residency targets must be maintained.

Prior to January 1, 2015, the Company utilized the effective yield method whereby the Company recognized tax credits generally over 10 years and amortized the initial cost of the investment to provide a constant effective yield over the period that tax credits are allocated to the Company. On January 1, 2015, the Company adopted Accounting Standards Update ("ASU") No. 2014-01, "Accounting for Investments in Qualified Affordable Housing Projects" prospectively for new investments. ASU No. 2014-01 permits reporting entities to make an accounting policy election to account for their investments in qualified affordable housing projects using the proportional amortization method if certain conditions are met. As permitted by ASU No. 2014-01, the Company elected to continue to utilize the effective yield method for investments made prior to January 1, 2015.

Unfunded commitments to fund these low-income housing partnerships were $\$ 15.2$ million and $\$ 17.5$ million as of December 31, 2018 and 2017, respectively. These unfunded commitments are unconditional and legally binding and are recorded in other liabilities in the consolidated statements of condition. See Note 18 Affordable Housing Projects Tax Credit Partnerships for more information.

The Company also has limited partnership interests in solar energy tax credit partnership investments. These partnerships develop, build, own and operate solar renewable energy projects. Over the course of these investments, the Company expects to receive federal and state tax credits, tax-related benefits, and excess cash available for distribution, if any. The Company may be called to sell its interest in the limited partnerships through a call option once all investment tax credits have been recognized. Tax benefits associated with these investments are generally recognized over 6 years.

These entities meet the definition of a VIE; however, the Company is not the primary beneficiary of the entities, as the general partner has both the power to direct the activities that most significantly impact the economic performance of the entities and the obligation to absorb losses or the right to receive benefits that could be significant to the entities. While the partnership agreements allow the limited partners, through a majority vote, to remove the general partner, this right is not deemed to be substantive as the general partner can only be removed for cause.

The investments in these entities are initially recorded at cost, which approximates the maximum exposure to loss as a result of the Company's involvement with these unconsolidated entities. The balance of the Company's investments in these entities was $\$ 85.9$ million and $\$ 87.6$ million as of December 31, 2018 and 2017, respectively, and is included in other assets in the consolidated statements of condition.

## Investment Securities

Investment securities are accounted for according to their purpose and holding period. Trading securities are those that are bought and held principally for the purpose of selling them in the near term. The Company held no trading securities as of December 31, 2018 and 2017. Available-for-sale investment securities, comprised of debt and mortgage-backed securities, are those that may be sold before maturity due to changes in the Company's interest rate risk profile or funding needs, and are reported at fair value with unrealized gains and losses, net of taxes, reported as a component of other comprehensive income. Held-tomaturity investment securities, comprised of debt and mortgage-backed securities, are those that management has the positive intent and ability to hold to maturity and are reported at amortized cost.

Realized gains and losses are recorded in noninterest income and are determined on a trade date basis using the specific identification method. Interest and dividends on investment securities are recognized in interest income on an accrual basis. Premiums and discounts are amortized or accreted into interest income using the interest method over the expected lives of the individual securities.

Transfers of debt securities from the available-for-sale category to the held-to-maturity category are made at fair value at the date of transfer. The unrealized holding gain or loss at the date of transfer remains in accumulated other comprehensive income and in the carrying value of the held-to-maturity investment security. Premiums or discounts on investment securities are amortized or accreted as an adjustment of yield using the interest method over the estimated life of the security. Unrealized holding gains or losses that remain in accumulated other comprehensive income are also amortized or accreted over the estimated life of the security as an adjustment of yield, offsetting the related amortization of the premium or accretion of the discount.

## Other-Than-Temporary-Impairments of Investment Securities

The Company conducts an other-than-temporary-impairment ("OTTI") analysis of investment securities on a quarterly basis or more often if a potential losstriggering event occurs. A write-down of a debt security is recorded when fair value is below amortized cost in circumstances where: (1) the Company has the intent to sell a security; (2) it is more likely than not that the Company will be required to sell the security before recovery of its amortized cost basis; or (3) the Company does not expect to recover the entire amortized cost basis of the security. If the Company intends to sell a security or if it is more likely than not that the Company will be required to sell the security before recovery, an OTTI write-down is recognized in earnings equal to the entire difference between the security's amortized cost basis and its fair value. If the Company does not intend to sell the security or it is not more likely than not that it will be required to sell the security before recovery, the OTTI write-down is separated into an amount representing credit loss, which is recognized in earnings, and an amount related to all other factors, which is recognized in other comprehensive income. To determine the amount related to credit loss on a debt security, the Company applies a methodology similar to that used for evaluating the impairment of loans. As of December 31, 2018, management determined that the Company did not own any investment securities that were other-than-temporarily-impaired.

Residential mortgage loans with the intent to be sold in the secondary market are accounted for on an aggregate basis under the fair value option. Fair value is primarily determined based on quoted prices for similar loans in active markets. Non-refundable fees and direct loan origination costs related to residential mortgage loans held for sale are recognized as part of the cost basis of the loan at the time of sale. Gains and losses on sales of residential mortgage loans (sales proceeds minus carrying value) are recorded in the mortgage banking component of noninterest income.

Commercial loans that management has an active plan to sell are valued on an individual basis at the lower-of-cost-or fair value. Fair value is primarily determined based on quoted prices for similar loans in active markets or agreed upon sales prices. Any reduction in the loan's value, prior to being transferred to the held-for-sale category, is reflected as a charge-off of the recorded investment in the loan resulting in a new cost basis, with a corresponding reduction in the allowance for loan and lease losses. Further decreases in the fair value of the loan are recognized in noninterest expense.

## Loans and Leases

Loans are reported at the principal amount outstanding, net of unearned income including unamortized deferred loan fees and costs, and cumulative net charge-offs. Interest income is recognized on an accrual basis. Loan origination fees, certain direct costs, and unearned discounts and premiums, if any, are deferred and are generally amortized into interest income as yield adjustments using the interest method over the contractual life of the loan. Loan commitment fees are generally recognized into noninterest income. Other credit-related fees are recognized as fee income, a component of noninterest income, when earned.

Direct financing leases are carried at the aggregate of lease payments receivable plus the estimated residual value of leased property, less unearned income. Leveraged leases, which are a form of direct financing leases, are carried net of non-recourse debt. Unearned income on direct financing and leveraged leases is amortized over the lease term by methods that approximate the interest method. Residual values on leased assets are periodically reviewed for impairment.

Portfolio segments are defined as the level at which an entity develops and documents a systematic methodology to determine its allowance for loan and lease losses (the "Allowance"). Management has determined that the Company has two portfolio segments of loans and leases (commercial and consumer) in determining the Allowance. Both quantitative and qualitative factors are used by management at the portfolio segment level in determining the adequacy of the Allowance for the Company. Classes of loans and leases are a disaggregation of a Company's portfolio segments. Classes are defined as a group of loans and leases which share similar initial measurement attributes, risk characteristics, and methods for monitoring and assessing credit risk. Management has determined that the Company has seven classes of loans and leases (commercial and industrial, commercial mortgage, construction, lease financing, residential mortgage, home equity, automobile, and other). The "other" class of loans and leases is comprised of revolving credit, installment, and lease financing arrangements.

## Non-Performing Loans and Leases

Generally, all classes of commercial loans and leases are placed on non-accrual status upon becoming contractually past due 90 days as to principal or interest (unless loans and leases are adequately secured by collateral, are in the process of collection, and are reasonably expected to result in repayment), when terms are renegotiated below market levels, or where substantial doubt about full repayment of principal or interest is evident. For residential mortgage and home equity loan classes, loans past due 120 days as to principal or interest may be placed on non-accrual status, and a partial charge-off may be recorded, depending on the collateral value and/or the collectability of the loan. For automobile and other consumer loan classes, the entire outstanding balance of the loan is charged off when the loan becomes 120 days past due as to principal or interest.

When a loan or lease is placed on non-accrual status, the accrued and unpaid interest receivable is reversed and the loan or lease is accounted for on the cash or cost recovery method until qualifying for return to accrual status. All payments received on non-accrual loans and leases are applied against the principal balance of the loan or lease. A loan or lease may be returned to accrual status when all delinquent interest and principal become current in accordance with the terms of the loan or lease agreement and when doubt about repayment is resolved.

Generally, for all classes of loans and leases, a charge-off is recorded when it is probable that a loss has been incurred and when it is possible to determine a reasonable estimate of the loss. For all classes of commercial loans and leases, a charge-off is determined on a judgmental basis after due consideration of the debtor's prospects for repayment and the fair value of collateral. For the pooled segment of the Company's commercial and industrial loan class, which consists of small business loans, the entire outstanding balance of the loan remains on accrual status until it is charged off during the month that the loan becomes 120 days past due as to principal or interest. As previously mentioned, for residential mortgage and home equity loan classes, a partial charge-off may be recorded at 120 days past due as to principal or interest depending on the collateral value and/or the collectability of the loan. In the event that a loan or line in the home equity loan class is behind another financial institution's first mortgage, the entire outstanding balance of the loan is charged off when the loan becomes 120 days past due as to principal or interest, unless the combined loan-to-value ratio is $60 \%$ or less. As noted above, loans in the automobile and other consumer loan classes are charged off in its entirety upon the loan becoming 120 days past due as to principal or interest.

## Impaired Loans

A loan is considered impaired when, based on current information and events, it is probable that the Company will not be able to collect all amounts due from the borrower in accordance with the contractual terms of the loan, including scheduled interest payments. Impaired loans include all classes of commercial non-accruing loans (except lease financing and small business loans), and all loans modified in a troubled debt restructuring. Impaired loans exclude lease financing and smaller balance homogeneous loans (consumer and small business non-accruing loans) that are collectively evaluated for impairment.

For all classes of commercial loans, a quarterly evaluation of individual commercial borrowers is performed to identify impaired loans. The identification of specific borrowers for review is based on a review of non-accrual loans as well as those loans specifically identified by management as exhibiting above average levels of risk.

When a loan has been identified as being impaired, the amount of impairment is measured based on the present value of expected future cash flows discounted at the loan's effective interest rate, the loan's observable market price, or the estimated fair value of the collateral, less any selling costs, if the loan is collateral-dependent. If the measurement of the impaired loan is less than the recorded investment in the loan (including accrued interest, net of deferred loan fees or costs, and unamortized premiums or discounts), impairment is recognized by establishing or adjusting an existing allocation of the Allowance, or by recording a partial charge-off of the loan to its fair value. Interest payments made on impaired loans are typically applied to principal unless collectability of the principal amount is reasonably assured, in which case interest income may be accrued or recognized on a cash basis.

## Loans Modified in a Troubled Debt Restructuring

Loans are considered to have been modified in a troubled debt restructuring when, due to a borrower's financial difficulties, the Company makes certain concessions to the borrower that it would not otherwise consider. Modifications may include interest rate reductions, principal or interest forgiveness, forbearance, and other actions intended to minimize economic loss and to avoid foreclosure or repossession of collateral. Generally, a non-accrual loan that has been modified in a troubled debt restructuring remains on non-accrual status for a period of at least 6 months to demonstrate that the borrower is able to meet the terms of the modified loan. However, performance prior to the modification, or significant events that coincide with the modification, are included in assessing whether the borrower can meet the new terms and may result in the loan being returned to accrual status at the time of loan modification or after a shorter performance period. If the borrower's ability to meet the revised payment schedule is uncertain, the loan remains on non-accrual status.

## Reserve for Credit Losses

The Company's reserve for credit losses is comprised of two components, the Allowance and the reserve for unfunded commitments (the "Unfunded Reserve").

## Allowance for Loan and Lease Losses

The Company maintains an Allowance adequate to cover management's estimate of probable credit losses as of the balance sheet date. Loans and leases that are charged off reduce the Allowance while recoveries of loans and leases previously charged off increase the Allowance. Other changes to the level of the Allowance are recognized through charges or credits to the provision for credit losses (the "Provision"). The Allowance considers both unimpaired and impaired loans and is developed and documented at the portfolio segment level (commercial and consumer).

The level of the Allowance related to the Company's commercial portfolio segment is generally based on the credit risk ratings and historical loss experience of individual borrowers. This is supplemented as necessary by credit judgment to address observed changes in trends and conditions, and other relevant environmental and economic factors that may affect the collectability of loans and leases. Excluding those loans and leases evaluated individually for impairment, the Company's remaining commercial loans and leases are pooled and collectively evaluated for impairment based on business unit and internal risk rating segmentation.

The level of the Allowance related to the Company's consumer portfolio segment is generally based on analyses of homogeneous pools of loans and leases. Loans and leases are pooled based on similar loan and lease risk characteristics for collective evaluation of impairment. Loss estimates are calculated based on historical rolling average loss rates and average delinquency flows to loss. Consumer loans that have been individually evaluated for impairment or modified in a troubled debt restructuring are excluded from the homogeneous pools. Impairment related to such loans is generally determined based on the present value of expected future cash flows discounted at the loan's original effective interest rate.

The Allowance also includes an estimate for inherent losses not reflected in the historical analyses. Relevant factors include, but are not limited to, concentrations of credit risk (geographic, large borrower, and industry), economic trends and conditions, changes in underwriting standards, experience and depth of lending staff, trends in delinquencies, and the level of net charge-offs. In addition, the Company uses a variety of other tools to estimate probable credit losses including, but not limited to, a rolling quarterly forecast of asset quality metrics; stress testing; and performance indicators based on the Company's own experience, peers, or other industry sources.

## Reserve for Unfunded Commitments

The Unfunded Reserve is a component of other liabilities and represents the estimate for probable credit losses inherent in unfunded commitments to extend credit. Unfunded commitments to extend credit include banker's acceptances, and standby and commercial letters of credit. The process used to determine the Unfunded Reserve is consistent with the process for determining the Allowance, as adjusted for estimated funding probabilities or loan and lease equivalency factors. The level of the Unfunded Reserve is adjusted by recording an expense or recovery in other noninterest expense.

## Cash and Cash Equivalents

Cash and cash equivalents include cash and due from banks, interest-bearing deposits in other banks, and funds sold. All amounts are readily convertible to cash and have maturities of less than 90 days.

## Premises and Equipment

Premises and equipment, including leasehold improvements, are stated at cost, less accumulated depreciation and amortization. Capital leases are included in premises and equipment at the capitalized amount less accumulated amortization.

Premises and equipment are depreciated using the straight-line method over the estimated useful lives of the respective assets. Estimated useful lives generally range up to 30 years for buildings and up to 10 years for equipment. Capitalized leased assets and leasehold improvements are amortized over the shorter of the estimated useful life of the asset or the lease term. Repairs and maintenance are charged to expense as incurred, while improvements which extend the estimated useful life of the asset are capitalized and depreciated over the estimated remaining life of the asset.

Premises and equipment are periodically evaluated for impairment when events or changes in circumstances indicate the carrying amount may not be recoverable. Impairment exists when the expected undiscounted future cash flows of premises and equipment are less than its carrying amount. In that event, the Company records a loss for the difference between the carrying amount and the fair value of the asset based on quoted market prices, if applicable, or a discounted cash flow analysis.

## Foreclosed Real Estate

Foreclosed real estate consists of properties acquired through foreclosure proceedings or acceptance of a deed-in-lieu of foreclosure. These properties are recorded at fair value less estimated costs to sell the property. If the recorded investment in the loan exceeds the property's fair value at the time of acquisition, a charge-off is recorded against the Allowance. If the fair value of the property at the time of acquisition exceeds the carrying amount of the loan, the excess is recorded either as a recovery to the Allowance if a charge-off had previously been recorded, or as a gain on initial transfer in other noninterest income. Subsequent decreases in the property's fair value and operating expenses of the property are recognized through charges to other noninterest expense. The fair value of the property acquired is based on third party appraisals, broker price opinions, recent sales activity, or a combination thereof, subject to management judgment.

## Mortgage Servicing Rights

Mortgage servicing rights are recognized as assets when mortgage loans are sold and the rights to service those loans are retained. Mortgage servicing rights are initially recorded at fair value by using a discounted cash flow model to calculate the present value of estimated future net servicing income.

The Company's mortgage servicing rights accounted for under the fair value method are carried on the statements of condition at fair value with changes in fair value recorded in mortgage banking income in the period in which the change occurs. Changes in the fair value of mortgage servicing rights are primarily due to changes in valuation inputs, assumptions, and the collection and realization of expected cash flows.

The Company's mortgage servicing rights accounted for under the amortization method are initially recorded at fair value. However, these mortgage servicing rights are amortized in proportion to and over the period of estimated net servicing income. An impairment analysis is prepared on a quarterly basis by estimating the fair value of the mortgage servicing rights and comparing that value to the carrying amount. A valuation allowance is established when the carrying amount of these mortgage servicing rights exceeds fair value.

## Goodwill

Goodwill is initially recorded as the excess of the purchase price over the fair value of the net assets acquired in a business combination and is subsequently evaluated at least annually for impairment. Goodwill impairment testing is performed at the reporting unit level, equivalent to a business segment or one level below. The Company has goodwill assigned to the following reporting units: Investment Services and Retail Banking.

The Company performs its annual evaluation of goodwill impairment in the fourth quarter of each year and on an interim basis if events or changes in circumstances indicate that there may be impairment. The Company performs a qualitative assessment to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. The qualitative factors considered include, but are not limited to, macroeconomic and State of Hawaii economic conditions, industry and market conditions and trends, the Company's financial performance, market capitalization, stock price, and any Company-specific events relevant to the assessment. If the assessment of qualitative factors indicates that it is not more likely than not that an impairment exists, no further testing is performed; otherwise an impairment test is performed. Prior to 2017, the goodwill impairment test was a two-step test. The first step compared the estimated fair value of identified reporting units with their carrying amount, including goodwill. If the estimated fair value of a reporting unit was less than the carrying value, the second step was required to determine the implied fair value of the reporting unit's goodwill and the amount of goodwill impairment, if any. In 2017, the Company elected to early adopt ASU No. 2017-04, "Simplifying the Test for Goodwill Impairment." The guidance removed Step 2 of the goodwill impairment test. Goodwill impairment will now be the amount by which a reporting unit’s carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. All other goodwill impairment guidance remained largely unchanged. Subsequent reversals of goodwill impairment are prohibited. For the year ended December 31, 2018, the Company's goodwill impairment evaluation, based on its qualitative assessment, indicated there was no impairment.

## Non-Marketable Equity Securities

The Company is required to own Federal Home Loan Bank ("FHLB") of Des Moines and Federal Reserve Bank ("FRB") stock as a condition of membership. These non-marketable equity securities are accounted for at cost which equals par or redemption value. These securities do not have a readily determinable fair value as their ownership is restricted and there is no market for these securities. These securities can only be redeemed or sold at their par value and only to the respective issuing government supported institution or to another member institution. The Company records these non-marketable equity securities as a component of other assets, which are periodically evaluated for impairment. Management considers these non-marketable equity securities to be long-term investments. Accordingly, when evaluating these securities for impairment, management considers the ultimate recoverability of the par value rather than by recognizing temporary declines in value.

## Bank-Owned Life Insurance

The Company purchases life insurance policies on the lives of certain officers and employees and is the owner and beneficiary of the policies. The Company invests in these Bank-Owned Life Insurance ("BOLI") policies to provide an efficient form of funding for long-term retirement and other employee benefits costs. The Company records these BOLI policies in the consolidated statements of condition at cash surrender value, with changes recorded in noninterest income in the consolidated statements of income.

## Securities Sold Under Agreements to Repurchase

The Company enters into agreements under which it sells securities subject to an obligation to repurchase the same or similar securities. Under these arrangements, the Company may transfer legal control over the assets but still retain effective control through an agreement that both entitles and obligates the Company to repurchase the assets. As a result, securities sold under agreements to repurchase are accounted for as collateralized financing arrangements (i.e., secured borrowings) and not as a sale and subsequent repurchase of securities. The obligation to repurchase the securities is reflected as a liability in the Company's consolidated statements of condition, while the securities underlying the securities sold under agreements to repurchase remain in the respective asset accounts. See Note 19 Balance Sheet Offsetting for more information.

## Pension and Postretirement Benefit Plans

The Company incurs certain employment-related expenses associated with its two frozen pension plans and a postretirement benefit plan (the "Plans"). In order to measure the expense associated with the Plans, various assumptions are made including the discount rate, expected return on plan assets, anticipated mortality rates, and expected future healthcare costs. The assumptions are based on historical experience as well as current facts and circumstances. The Company uses a December 31 measurement date for its Plans. As of the measurement date, plan assets are determined based on fair value, generally representing observable market prices. The projected benefit obligation is primarily determined based on the present value of projected benefit distributions at an assumed discount rate.

Net periodic pension benefit costs include interest costs based on an assumed discount rate, the expected return on plan assets based on actuarially derived market-related values, and the amortization of net actuarial gains or losses. Net periodic postretirement benefit costs include service costs, interest costs based on an assumed discount rate, and the amortization of prior service credits and net actuarial gains or losses. Differences between expected and actual results in each year are included in the net actuarial gain or loss amount, which is recognized in other comprehensive income. The net actuarial gain or loss in excess of a $10 \%$ corridor is amortized in net periodic benefit cost over the average remaining expected lives of the pension plan participants and over the average remaining future service years of the postretirement benefit plan participants. The prior service credit is amortized over the average remaining service period to full eligibility for participating employees expected to receive benefits.

The Company recognizes in its consolidated statements of condition an asset for a plan's overfunded status or a liability for a plan's underfunded status. The Company also measures the Plans' assets and obligations that determine its funded status as of the end of the year and recognizes those changes in other comprehensive income, net of tax.

## Income Taxes

The Parent files a consolidated federal income tax return with the Bank and its subsidiaries. Calculation of the Company's provision for income taxes requires the interpretation of income tax laws and regulations and the use of estimates and judgments in its determination. The Company is subject to examination by governmental authorities that may give rise to income tax issues due to differing interpretations. Changes to the liability for income taxes also occur due to changes in income tax rates, implementation of new business strategies, resolution of issues with taxing authorities, and newly enacted statutory, judicial, and regulatory guidance.

Deferred income taxes are provided to reflect the tax effect of temporary differences between financial statement carrying amounts and the corresponding tax basis of assets and liabilities. Deferred income taxes are calculated by applying enacted statutory tax rates and tax laws to future years in which temporary differences are expected to reverse. The impact on deferred tax assets and liabilities from a change in tax rates is recognized in income in the period that the tax rate change is enacted. A deferred tax valuation allowance is established if it is more likely than not that a deferred tax asset will not be realized.

The Company's tax sharing policy provides for the settlement of income taxes between each relevant subsidiary as if the subsidiary had filed a separate return. Payments are made to the Parent by subsidiaries with tax liabilities and subsidiaries that generate tax benefits receive payments for those benefits as used.

The Company maintains reserves for certain tax positions that arise in the normal course of business. As of December 31, 2018, these positions were evaluated based on an assessment of probabilities as to the likelihood of whether a liability had been incurred. Such assessments are reviewed as events occur and adjustments to the reserves are made as appropriate. In evaluating a tax position for recognition, the Company evaluates whether it is more likely than not that a tax position will be sustained upon examination, including resolution of related appeals or litigation processes, based on the technical merits of the position. If the tax position meets the more likely than not recognition threshold, the tax position is measured and recognized in the Company's Consolidated Financial Statements as the largest amount of tax benefit that, in management's judgment, is greater than $50 \%$ likely of being realized upon ultimate settlement.

Public law No. 115-97, known as the Tax Cuts and Jobs Act (the "Tax Act"), which was enacted on December 22, 2017, reduced the U.S. federal corporate tax rate from $35 \%$ to $21 \%$ effective January 1, 2018. Also on December 22, 2017, the Securities and Exchange Commission issued Staff Accounting Bulletin No. 118 ("SAB 118"), which provides guidance on accounting for tax effects of the Tax Act. SAB 118 provides a measurement period of up to one year from the enactment date to complete the accounting. As such, adjustments during this measurement period were included in net earnings from continuing operations as an adjustment to income tax expense in the reporting period when such adjustments were determined. The provisional amount recorded in the fourth quarter of 2017 related to the remeasurement of the Company's deferred tax balance resulted in additional income tax expense of $\$ 3.6$ million. An additional $\$ 0.1$ million was expensed in the first quarter of 2018 due to the remeasurement of the Company's deferred tax balance. In addition, during the first quarter of 2018, the Company recorded a $\$ 2.0$ million basis adjustment on its low income housing partnership investments, which consequently reduced income tax expense by the same amount. The remeasurement of the Company's deferred tax balance in the third quarter of 2018 resulted in an income tax expense reduction of $\$ 0.3$ million. The Company completed its analysis and finalized the impact of the Tax Act in the third quarter of 2018. See Note 16 Income Taxes for more information.

## Treasury Stock

Shares of the Parent's common stock that are repurchased are recorded in treasury stock at cost. On the date of subsequent re-issuance, the treasury stock account is reduced by the cost of such stock on a first-in, first-out basis.

Basic earnings per share is computed by dividing net income by the weighted average number of common shares outstanding for the period. Diluted earnings per share is computed by dividing net income by the weighted average number of common shares outstanding for the period, assuming conversion of all potentially dilutive common stock equivalents.

## Derivative Financial Instruments

In the ordinary course of business, the Company enters into derivative financial instruments as an end-user in connection with its risk management activities and to accommodate the needs of its customers. The Company has elected not to qualify for hedge accounting methods addressed under current provisions of GAAP. Derivative financial instruments are stated at fair value on the consolidated statements of condition with changes in fair value reported in current period earnings.

## Share-Based Compensation

The Company may grant share-based compensation to employees and non-employee directors in the form of restricted stock, restricted stock units and stock options. The fair value of restricted stock is determined based on the closing price of the Parent's common stock on the date of grant. The Company recognizes compensation expense related to restricted stock on a straight-line basis over the vesting period for service-based awards, plus additional recognition of costs associated with accelerated vesting based on the projected attainment of Company performance measures. Restricted stock units ("RSUs") are payable solely in cash which are accounted for as other liabilities in the consolidated statements of condition. The fair value of RSUs is initially valued based on the closing price of the Parent's common stock on the date of grant and is amortized in the statement of income over the vesting period. The RSUs are subsequently remeasured in the same manner described above at the end of each reporting period until settlement. The fair value of stock options is estimated at the date of grant using the Black-Scholes option pricing model and related assumptions. The Company uses historical data to predict option exercise and employee termination behavior. Expected volatilities are based on the historical volatility of the Parent's common stock. The expected term of options granted is derived from actual historical exercise activity and represents the period of time that options granted are expected to be outstanding. The risk-free rate is derived from the U.S. Treasury yield curve in effect at the time of grant based on the expected life of the option. The dividend yield is equal to the dividend yield of the Parent's common stock at the time of grant. The amortization of the expense related to stock options reflects estimated forfeitures, adjusted for actual forfeiture experience. Amortization expense related to stock options is recorded in the statements of income as a component of salaries and benefits for employees and as a component of other noninterest expense for non-employee directors, with a corresponding increase to capital surplus in shareholders' equity. As the expense related to stock options is recognized, a deferred tax asset is established that represents an estimate of future income tax deductions from the release of restrictions or the exercise of stock options.

## Advertising Costs

Advertising costs are expensed as incurred. Advertising costs were $\$ 6.0$ million for the years ended December 31, 2018, 2017, and 2016.

## International Operations

The Bank has operations that are conducted in certain Pacific Islands that are denominated in U.S. dollars. These operations are classified as domestic.

## Fair Value Measurements

Fair value measurements apply whenever GAAP requires or permits assets or liabilities to be measured at fair value either on a recurring or nonrecurring basis. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability in the principal or most advantageous market for an asset or liability in an orderly transaction between market participants at the measurement date. Fair value is based on the assumptions that management believes market participants would use when pricing an asset or liability. Fair value measurement and disclosure guidance established a three-level fair value hierarchy that prioritizes the use of inputs used in valuation methodologies. Management maximizes the use of observable inputs and minimizes the use of unobservable inputs when determining fair value measurements. Management reviews and updates the fair value hierarchy classifications of the Company's assets and liabilities on a quarterly basis. The three-level fair value hierarchy is as follows:

Level 1: Inputs to the valuation methodology are quoted prices, unadjusted, for identical assets or liabilities in active markets. A quoted price in an active market provides the most reliable evidence of fair value and shall be used to measure fair value whenever available. A contractually binding sales price also provides reliable evidence of fair value.
Level 2: Inputs to the valuation methodology include quoted prices for similar assets or liabilities in active markets; inputs to the valuation methodology include quoted prices for identical or similar assets or liabilities in markets that are not active; or inputs to the valuation methodology that utilize model-based techniques for which all significant assumptions are observable in the market.
Level 3: Inputs to the valuation methodology are unobservable and significant to the fair value measurement; inputs to the valuation methodology that utilize model-based techniques for which significant assumptions are not observable in the market; or inputs to the valuation methodology that requires significant management judgment or estimation, some of which may be internally developed.

In some instances, an instrument may fall into multiple levels of the fair value hierarchy. In such instances, the instrument's level within the fair value hierarchy is based on the lowest of the three levels (with Level 3 being the lowest) that is significant to the fair value measurement. Our assessment of the significance of an input requires judgment and considers factors specific to the instrument.

See Note 14 Employee Benefits and Note 21 Fair Value of Assets and Liabilities for the required fair value measurement disclosures.

In May 2014, the Financial Accounting Standards Board ("FASB") issued ASU No. 2014-09, "Revenue from Contracts with Customers." The standard’s core principle is that a company will recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. In doing so, companies generally will be required to use more judgment and make more estimates than under prior guidance. These may include identifying performance obligations in the contract, estimating the amount of variable consideration to include in the transaction price and allocating the transaction price to each separate performance obligation. Subsequent to the issuance of ASU 2014-09, the FASB issued targeted updates to clarify specific implementation issues including ASU No. 2016-08, "Principal versus Agent Considerations (Reporting Revenue Gross versus Net)," ASU No. 2016-10, "Identifying Performance Obligations and Licensing," ASU No. 2016-12, "Narrow-Scope Improvements and Practical Expedients," and ASU No. 2016-20 "Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers." For financial reporting purposes, the standard allows for either full retrospective adoption, meaning the standard is applied to all of the periods presented, or modified retrospective adoption, meaning the standard is applied only to the most current period presented in the financial statements with the cumulative effect of initially applying the standard recognized at the date of initial application. Since the standard does not apply to revenue associated with financial instruments, including loans and securities that are accounted for under other GAAP, the new standard did not have a material impact on revenue most closely associated with financial instruments, including interest income and expense. The Company completed its overall assessment of revenue streams and review of related contracts potentially affected by the ASUs, including trust and asset management fees, deposit related fees, interchange fees, merchant income, and annuity and insurance commissions. Based on this assessment, the Company concluded that ASU 2014-09 did not materially change the method in which the Company currently recognizes revenue for these revenue streams. The Company also completed its evaluation of certain costs related to these revenue streams to determine whether such costs should be presented as expenses or contra-revenue (i.e., gross vs. net). Based on its evaluation, the Company determined that the classification of certain debit and credit card related costs should change (i.e., costs previously recorded as expense is now recorded as contra-revenue, and vice versa). These classification changes resulted in immaterial changes to both revenue and expense. The Company also determined that certain costs related to ATMs should be recorded as an expense rather than a reduction of revenue. This change did not have a material effect to noninterest income or expense. The Company adopted ASU 2014-09 and its related amendments on its required effective date of January 1, 2018 utilizing the modified retrospective approach. Since there was no net income impact upon adoption of the new guidance, a cumulative effect adjustment to opening retained earnings was not deemed necessary. Consistent with the modified retrospective approach, the Company did not adjust prior period amounts for the debit and credit card costs and the ATM costs reclassifications noted above. See Note 22 Revenue Recognition for more information.

In January 2016, the FASB issued ASU No. 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities." This ASU addresses certain aspects of recognition, measurement, presentation, and disclosure of financial instruments by making targeted improvements to GAAP as follows: (1) require equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income. However, an entity may choose to measure equity investments that do not have readily determinable fair values at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer; (2) simplify the impairment assessment of equity investments without readily determinable fair values by requiring a qualitative assessment to identify impairment. When a qualitative assessment indicates that impairment exists, an entity is required to measure the investment at fair value; (3) eliminate the requirement to disclose the fair value of financial instruments measured at amortized cost for entities that are not public business entities; (4) eliminate the requirement for public business entities to disclose the method(s) and significant assumptions used to estimate the fair value that is required to be disclosed for financial instruments measured at amortized cost on the balance sheet; (5) require public business entities to use the exit price notion when measuring the fair value of financial instruments for disclosure purposes; (6) require an entity to present separately in other comprehensive income the portion of the total change in the fair value of a liability resulting from a change in the instrument-specific credit risk when the entity has elected to measure the liability at fair value in accordance with the fair value option for financial instruments; (7) require separate presentation of financial assets and financial liabilities by measurement category and form of financial asset (that is, securities or loans and receivables) on the balance sheet or the accompanying notes to the financial statements; and (8) clarify that an entity should evaluate the need for a valuation allowance on a deferred tax asset related to available-for-sale securities in combination with the entity's other deferred tax assets. The Company's adoption of ASU No. 2016-01 on January 1, 2018 did not have a material impact on the Company’s Consolidated Financial Statements. In accordance with (5) above, the Company measured the fair value of its loan portfolio as of December 31, 2018 using an exit price notion (see Note 21 Fair Value of Assets and Liabilities).

In August 2016, the FASB issued ASU No. 2016-15, "Classification of Certain Cash Receipts and Cash Payments." At the time, GAAP was unclear or did not include specific guidance on how to classify certain transactions in the statement of cash flows. This ASU is intended to reduce diversity in practice in how eight particular transactions are classified in the statement of cash flows. ASU No. 2016-15 was effective for interim and annual reporting periods beginning after December 15, 2017. Entities were required to apply the guidance retrospectively. If it is impracticable to apply the guidance retrospectively for an issue, the amendments related to that issue would be applied prospectively. The Company adopted ASU No. 2016-15 on January 1, 2018. ASU No. 2016-15 did not have a material impact on the Company's Consolidated Financial Statements.

In March 2017, the FASB issued ASU No. 2017-07, "Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost." Under the new guidance, employers are required to present the service cost component of the net periodic benefit cost in the same income statement line item (e.g., Salaries and Benefits) as other employee compensation costs arising from services rendered during the period. In addition, only the service cost component will be eligible for capitalization in assets. Employers will present the other components of net periodic benefit cost separately (e.g., Other Noninterest Expense) from the line item that includes the service cost. ASU No. 2017-07 became effective for interim and annual reporting periods beginning after December 15, 2017. Employers will apply the guidance on the presentation of the components of net periodic benefit cost in the income statement retrospectively. The guidance limiting the capitalization of net periodic benefit cost in assets to the service cost component will be applied prospectively. The Company adopted ASU No. 2017-07 on January 1, 2018 and utilized the ASU's practical expedient allowing entities to estimate amounts for comparative periods using the information previously disclosed in their pension and other postretirement benefit plan footnote. ASU No. 2017-07 did not have a material impact on the Company's Consolidated Financial Statements.

In February 2018, the FASB issued ASU No. 2018-02, "Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." This ASU allows a reclassification from accumulated other comprehensive income ("AOCI") to retained earnings for certain income tax effects stranded in AOCI as a result of the Tax Act. Consequently, the reclassification eliminates the stranded tax effects resulting from the Tax Act and is intended to improve the usefulness of information reported to financial statement users. However, because the ASU only relates to the reclassification of the income tax effects of the Tax Act, the underlying guidance that requires the effect of a change in tax laws or rates to be included in income from continuing operations is not affected. ASU No. 2018-02 is effective for the Company's reporting period beginning on January 1, 2019; early adoption is permitted. The Company elected to adopt ASU No. 2018-02 during the first quarter of 2018, and elected to reclassify the income tax effects of the Tax Act from AOCI to retained earnings. The reclassification decreased AOCI and increased retained earnings by $\$ 7.5$ million, with zero net effect on total shareholders' equity. The Company utilizes the individual securities approach when releasing income tax effects from AOCI for its investment securities.

In August 2018, the FASB issued ASU No. 2018-14, "Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans." This ASU makes minor changes to the disclosure requirements for employers that sponsor defined benefit pension and/or other postretirement benefit plans. ASU 2018-14 is effective for fiscal years ending after December 15, 2020; early adoption is permitted. The Company elected to early adopt ASU 2018-14 during the quarter ended December 31, 2018. As ASU 2018-14 only revises disclosure requirements (reflected in Note 14 Employee Benefits), the adoption did not have any impact on the Company's Consolidated Financial Statements.

In September 2018, the FASB issued ASU No. 2018-15, "Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract." This ASU requires an entity in a cloud computing arrangement (i.e., hosting arrangement) that is a service contract to follow the internal-use software guidance in ASC 350-40 to determine which implementation costs to capitalize as assets or expense as incurred. Capitalized implementation costs should be presented in the same line item on the balance sheet as amounts prepaid for the hosted service, if any (generally as an "other asset"). The capitalized costs will be amortized over the term of the hosting arrangement, with the amortization expense being presented in the same income statement line item as the fees paid for the hosted service. ASU 2018-15 is effective for interim and annual reporting periods beginning after December 15, 2019; early adoption is permitted. The Company elected to adopt ASU 2018-15 during the quarter ended September 30, 2018 on a prospective basis. ASU 2018-15 did not have a material impact on the Company's Consolidated Financial Statements.

## Accounting Standards Pending Adoption

In February 2016, the FASB issued ASU No. 2016-02, "Leases." Under the new guidance, lessees will be required to recognize the following for all leases (with the exception of short-term leases): 1) a lease liability, which is the present value of a lessee’s obligation to make lease payments, and 2) a right-of-use asset, which is an asset that represents the lessee's right to use, or control the use of, a specified asset for the lease term. Lessor accounting under the new guidance remains largely unchanged as it is substantially equivalent to existing guidance for sales-type leases, direct financing leases, and operating leases. Leveraged leases have been eliminated, although lessors can continue to account for existing leveraged leases using the current accounting guidance. Other limited changes were made to align lessor accounting with the lessee accounting model and the new revenue recognition standard. All entities will classify leases to determine how to recognize lease-related revenue and expense. Quantitative and qualitative disclosures will be required by lessees and lessors to meet the objective of enabling users of financial statements to assess the amount, timing, and uncertainty of cash flows arising from leases. The intention is to require enough information to supplement the amounts recorded in the financial statements so that users can understand more about the nature of an entity's leasing activities. ASU No. 2016-02 is effective for interim and annual reporting periods beginning after December 15, 2018. All entities are required to use a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. As the Company elected the transition option provided in ASU No. 2018-11 (see below), the modified retrospective approach was applied on January 1, 2019 (as opposed to January 1, 2017). The Company also elected certain relief options offered in ASU 2016-02 including the package of practical expedients, the option not to separate lease and non-lease components and instead to account for them as a single lease component, and the option not to recognize right-ofuse assets and lease liabilities that arise from short-term leases (i.e., leases with terms of twelve months or less). The Company did not elect the hindsight practical expedient, which allows entities to use hindsight when determining lease term and impairment of right-of-use assets. The Company has several lease agreements, such as branch locations, which are currently considered operating leases, and therefore, not recognized on the Company's consolidated statements of condition. The new guidance requires these lease agreements to be recognized on the consolidated statements of condition as a right-of-use asset and a corresponding lease liability. Upon adoption of ASU 2016-02 on its required effective date of January 1, 2019, the Company recorded an operating lease right-of-use asset of $\$ 106.5$ million and a corresponding operating lease liability of $\$ 113.4$ million. The Company expects its regulatory capital ratios to remain above the thresholds necessary to be classified as a "well capitalized" institution. The new guidance did not have a material impact on the consolidated statements of income. The Company is completing its evaluation of the ASU’s expanded disclosure requirements effective for the March 31, 2019 Form 10Q.

In June 2016, the FASB issued ASU No. 2016-13, "Measurement of Credit Losses on Financial Instruments." This ASU significantly changes how entities will measure credit losses for most financial assets and certain other instruments that are not measured at fair value through net income. In issuing the standard, the FASB is responding to criticism that today's guidance delays recognition of credit losses. The standard will replace today's "incurred loss" approach with an "expected loss" model. The new model, referred to as the current expected credit loss ("CECL") model, will apply to: (1) financial assets subject to credit losses and measured at amortized cost, and (2) certain off-balance sheet credit exposures. This includes, but is not limited to, loans, leases, held-to-maturity securities, loan commitments, and financial guarantees. The CECL model does not apply to available-for-sale ("AFS") debt securities. For AFS debt securities with unrealized losses, entities will measure credit losses in a manner similar to what they do today, except that the credit losses will be recognized as allowances rather than reductions in the amortized cost of the securities. As a result, entities will recognize improvements to estimated credit losses immediately in earnings rather than as interest income over time, as they do today. The ASU also simplifies the accounting model for purchased creditimpaired debt securities and loans. ASU 2016-13 also expands the disclosure requirements regarding an entity's assumptions, models, and methods for estimating the allowance for loan and lease losses. In addition, entities will need to disclose the amortized cost balance for each class of financial asset by credit quality indicator, disaggregated by the year of origination. ASU No. 2016-13 is effective for interim and annual reporting periods beginning after December 15, 2019; early adoption is permitted for interim and annual reporting periods beginning after December 15, 2018. Entities will apply the standard's provisions as a cumulative-effect adjustment to retained earnings as of the beginning of the first reporting period in which the guidance is effective (i.e., modified retrospective approach). The Company is planning to adopt the standard in the first quarter of 2020 and is continuing its implementation efforts through its Company-wide implementation team. This team has assigned roles and responsibilities, key tasks to complete, and a general timeline to be followed. The team meets periodically to discuss the latest developments and ensure progress is being made. The team has been working with an advisory consultant and is finalizing the methodologies that will be utilized, which will be followed by developing and documenting processes, controls, policies and disclosure requirements in preparation for performing a full parallel run. The Company's preliminary evaluation indicates the provisions of ASU No. 2016-13 are expected to impact the Company's Consolidated Financial Statements, in particular the level of the reserve for credit losses. The Company is continuing to evaluate the extent of the potential impact and expects that portfolio composition and economic conditions at the time of adoption will be a factor.

In August 2017, the FASB issued ASU No. 2017-12, "Targeted Improvements to Accounting for Hedging Activities." This ASU’s objectives are to (1) improve the transparency and understandability of information conveyed to financial statement users about an entity's risk management activities by better aligning the entity's financial reporting for hedging relationships with those risk management activities; and (2) reduce the complexity of and simplify the application of hedge accounting by preparers. ASU No. 2017-12 is effective for interim and annual reporting periods beginning after December 15, 2018; early adoption is permitted. The Company currently does not designate any derivative financial instruments as formal hedging relationships, and therefore, does not utilize hedge accounting. However, the Company is currently evaluating this ASU to determine whether its provisions will enhance the Company's ability to employ certain risk management strategies, while improving the transparency and understanding of those strategies for financial statement users.

In July 2018, the FASB issued ASU No. 2018-11, "Leases - Targeted Improvements" to provide entities with relief from the costs of implementing certain aspects of the new leasing standard, ASU No. 2016-02. Specifically, under the amendments in ASU 2018-11: (1) entities may elect not to recast the comparative periods presented when transitioning to the new leasing standard, and (2) lessors may elect not to separate lease and non-lease components when certain conditions are met. The amendments have the same effective date as ASU 2016-02 (January 1, 2019 for the Company). The Company adopted ASU 2018-11 on its required effective date of January 1, 2019 and elected both transition options mentioned above. ASU 2018-11 did not have a material impact on the Company's Consolidated Financial Statements.

In August 2018, the FASB issued ASU No. 2018-13, "Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement." This ASU eliminates, adds and modifies certain disclosure requirements for fair value measurements. Among the changes, entities will no longer be required to disclose the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy, but will be required to disclose the range and weighted average used to develop significant unobservable inputs for Level 3 fair value measurements. ASU No. 2018-13 is effective for interim and annual reporting periods beginning after December 15, 2019; early adoption is permitted. Entities are also allowed to elect early adoption of the eliminated or modified disclosure requirements and delay adoption of the new disclosure requirements until their effective date. As ASU No. 2018-13 only revises disclosure requirements, it will not have a material impact on the Company's Consolidated Financial Statements.

In December 2018, the FASB issued ASU No. 2018-20, "Narrow-Scope Improvements for Lessors." This ASU (1) allows lessors to make an accounting policy election of presenting sales taxes and other similar taxes collected from lessees on a net basis, (2) requires a lessor to exclude lessor costs paid directly by a lessee to third parties on the lessor's behalf and include lessor costs that are paid by the lessor and reimbursed by the lessee in the measurement of variable lease revenue and the associated expense, and (3) clarifies that when lessors allocate variable payments to lease and non-lease components they are required to follow the recognition guidance in the new leases standard for the lease component and other applicable guidance, such as the new revenue standard, for the non-lease component. The Company adopted ASU 2018-20 on its required effective date of January 1, 2019 and elected to present sales taxes and other similar taxes collected from lessees on a net basis as described in (1) above. ASU 2018-20 did not have a material impact on the Company's Consolidated Financial Statements.

## Note 2. Restrictions on Cash and Cash and Cash Equivalents

The Company is required to maintain cash on hand or on deposit with the Federal Reserve Bank based on the amount of certain customer deposits, mainly checking accounts. The Bank's average required reserve balances were $\$ 72.3$ million and $\$ 73.2$ million as of December 31, 2018 and 2017, respectively.

The following table provides a reconciliation of cash and cash equivalents reported within the consolidated statements of condition that sum to the total of the same such amounts shown in the consolidated statements of cash flows:

|  | December 31, <br> 2018 | December 31, <br> 2017 |  |
| :--- | ---: | ---: | ---: |
| (dollars in thousands) | $\$$ | 3,028 | $\$$ |
| Interest-Bearing Deposits in Other Banks | $\mathbf{1 9 8 , 8 6 0}$ | $\mathbf{3 , 4 2 1}$ |  |
| Funds Sold | 321,413 |  |  |
| Cash and Due From Banks | $\$$ | 525,969 | $\$$ |
| Total Cash and Cash Equivalents |  |  | 447,851 |

## Note 3. Investment Securities

The amortized cost, gross unrealized gains and losses, and fair value of the Company's investment securities as of December 31, 2018, 2017, and 2016 were as follows:

| (dollars in thousands) | Amortized Cost |  |  | Gross Unrealized Gains | Gross Unrealized Losses |  |  | Fair <br> Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| December 31, 2018 |  |  |  |  |  |  |  |  |
| Available-for-Sale: |  |  |  |  |  |  |  |  |
| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 394,485 | \$ | 493 | \$ | $(2,577)$ | \$ | 392,401 |
| Debt Securities Issued by States and Political Subdivisions |  | 559,800 |  | 5,227 |  | $(1,031)$ |  | 563,996 |
| Debt Securities Issued by U.S. Government-Sponsored Enterprises |  | 56 |  | - |  | - |  | 56 |
| Debt Securities Issued by Corporations |  | 224,997 |  | - |  | $(1,857)$ |  | 223,140 |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 189,645 |  | 1,726 |  | (929) |  | 190,442 |
| Residential - U.S. Government-Sponsored Enterprises |  | 589,311 |  | 1,779 |  | $(12,563)$ |  | 578,527 |
| Commercial - Government Agencies |  | 63,864 |  | - |  | $(4,484)$ |  | 59,380 |
| Total Mortgage-Backed Securities |  | 842,820 |  | 3,505 |  | $(17,976)$ |  | 828,349 |
| Total | \$ | 2,022,158 | \$ | 9,225 | \$ | $(23,441)$ | \$ | 2,007,942 |
| Held-to-Maturity: |  |  |  |  |  |  |  |  |
| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 353,122 | \$ | 186 | \$ | $(1,093)$ | \$ | 352,215 |
| Debt Securities Issued by States and Political Subdivisions |  | 234,602 |  | 6,150 |  | - |  | 240,752 |
| Debt Securities Issued by Corporations |  | 97,266 |  | - |  | $(1,755)$ |  | 95,511 |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 1,861,874 |  | 3,886 |  | $(51,773)$ |  | 1,813,987 |
| Residential - U.S. Government-Sponsored Enterprises |  | 758,835 |  | 1,590 |  | $(20,259)$ |  | 740,166 |
| Commercial - Government Agencies |  | 176,393 |  | 147 |  | $(5,177)$ |  | 171,363 |
| Total Mortgage-Backed Securities |  | 2,797,102 |  | 5,623 |  | $(77,209)$ |  | 2,725,516 |
| Total | \$ | 3,482,092 | \$ | 11,959 | \$ | $(80,057)$ | \$ | 3,413,994 |

## December 31, 2017

## Available-for-Sale:

| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 424,912 | \$ | 2,053 | \$ | $(1,035)$ | \$ | 425,930 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Debt Securities Issued by States and Political Subdivisions |  | 618,167 |  | 9,894 |  | $(1,042)$ |  | 627,019 |
| Debt Securities Issued by Corporations |  | 268,003 |  | 199 |  | $(2,091)$ |  | 266,111 |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 233,268 |  | 3,129 |  | $(1,037)$ |  | 235,360 |
| Residential - U.S. Government-Sponsored Enterprises |  | 619,795 |  | 420 |  | $(10,403)$ |  | 609,812 |
| Commercial - Government Agencies |  | 71,999 |  | - |  | $(3,252)$ |  | 68,747 |
| Total Mortgage-Backed Securities |  | 925,062 |  | 3,549 |  | $(14,692)$ |  | 913,919 |
| Total | \$ | 2,236,144 | \$ | 15,695 | \$ | $(18,860)$ | \$ | 2,232,979 |
| Held-to-Maturity: |  |  |  |  |  |  |  |  |
| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 375,074 | \$ | 18 | \$ | $(1,451)$ | \$ | 373,641 |
| Debt Securities Issued by States and Political Subdivisions |  | 238,504 |  | 9,125 |  | - |  | 247,629 |
| Debt Securities Issued by Corporations |  | 119,635 |  | 123 |  | $(1,591)$ |  | 118,167 |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 2,229,985 |  | 9,975 |  | $(37,047)$ |  | 2,202,913 |
| Residential - U.S. Government-Sponsored Enterprises |  | 763,312 |  | 911 |  | $(11,255)$ |  | 752,968 |
| Commercial - Government Agencies |  | 201,660 |  | 797 |  | $(3,654)$ |  | 198,803 |
| Total Mortgage-Backed Securities |  | 3,194,957 |  | 11,683 |  | $(51,956)$ |  | 3,154,684 |
| Total | \$ | 3,928,170 | \$ | 20,949 | \$ | $(54,998)$ | \$ | 3,894,121 |

## December 31, 2016

Available-for-Sale:

| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 407,478 | \$ | 2,531 | \$ | $(1,294)$ | \$ | 408,715 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Debt Securities Issued by States and Political Subdivisions |  | 662,231 |  | 11,455 |  | $(1,887)$ |  | 671,799 |
| Debt Securities Issued by Corporations |  | 273,044 |  | 5 |  | $(3,870)$ |  | 269,179 |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 240,412 |  | 4,577 |  | $(1,145)$ |  | 243,844 |
| Residential - U.S. Government-Sponsored Enterprises |  | 511,234 |  | 971 |  | $(5,218)$ |  | 506,987 |


| Commercial - Government Agencies | 89,544 |  |  | - | $(4,027)$ |  |  | 85,517 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Total Mortgage-Backed Securities | 841,190 |  |  | 5,548 |  | $(10,390)$ |  | 836,348 |
| Total | \$ | 2,183,943 | \$ | 19,539 | \$ | $(17,441)$ | \$ | 2,186,041 |
| Held-to-Maturity: |  |  |  |  |  |  |  |  |
| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 530,149 | \$ | 1,562 | \$ | (771) | \$ | 530,940 |
| Debt Securities Issued by States and Political Subdivisions |  | 242,295 |  | 9,991 |  | - |  | 252,286 |
| Debt Securities Issued by Corporations |  | 135,620 |  | 416 |  | $(1,528)$ |  | 134,508 |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 1,940,076 |  | 20,567 |  | $(23,861)$ |  | 1,936,782 |
| Residential - U.S. Government-Sponsored Enterprises |  | 752,768 |  | 798 |  | $(10,919)$ |  | 742,647 |
| Commercial - Government Agencies |  | 232,089 |  | 940 |  | $(2,665)$ |  | 230,364 |
| Total Mortgage-Backed Securities |  | 2,924,933 |  | 22,305 |  | $(37,445)$ |  | 2,909,793 |
| Total | \$ | 3,832,997 | \$ | 34,274 | \$ | $(39,744)$ | \$ | 3,827,527 |

The table below presents an analysis of the contractual maturities of the Company's investment securities as of December 31, 2018. Debt securities issued by government agencies (Small Business Administration securities) and mortgage-backed securities are disclosed separately in the table below as these investment securities may prepay prior to their scheduled contractual maturity dates.

| (dollars in thousands) | Amortized Cost |  |  | Fair Value |
| :---: | :---: | :---: | :---: | :---: |
| Available-for-Sale: |  |  |  |  |
| Due in One Year or Less | \$ | 57,119 | \$ | 57,094 |
| Due After One Year Through Five Years |  | 613,577 |  | 613,408 |
| Due After Five Years Through Ten Years |  | 92,306 |  | 94,126 |
| Due After Ten Years |  | 22,830 |  | 23,536 |
|  |  | 785,832 |  | 788,164 |
|  |  |  |  |  |
| Debt Securities Issued by Government Agencies |  | 393,506 |  | 391,429 |
| Mortgage-Backed Securities: |  |  |  |  |
| Residential - Government Agencies |  | 189,645 |  | 190,442 |
| Residential - U.S. Government-Sponsored Enterprises |  | 589,311 |  | 578,527 |
| Commercial - Government Agencies |  | 63,864 |  | 59,380 |
| Total Mortgage-Backed Securities |  | 842,820 |  | 828,349 |
| Total | \$ | 2,022,158 | \$ | 2,007,942 |
|  |  |  |  |  |
| Held-to-Maturity: |  |  |  |  |
| Due in One Year or Less | \$ | 164,868 | \$ | 164,518 |
| Due After One Year Through Five Years |  | 311,016 |  | 312,837 |
| Due After Five Years Through Ten Years |  | 201,389 |  | 203,010 |
| Due After Ten Years |  | 7,717 |  | 8,113 |
|  |  | 684,990 |  | 688,478 |
| Mortgage-Backed Securities: |  |  |  |  |
| Residential - Government Agencies |  | 1,861,874 |  | 1,813,987 |
| Residential - U.S. Government-Sponsored Enterprises |  | 758,835 |  | 740,166 |
| Commercial - Government Agencies |  | 176,393 |  | 171,363 |
| Total Mortgage-Backed Securities |  | 2,797,102 |  | 2,725,516 |
| Total | \$ | 3,482,092 | \$ | 3,413,994 |

Investment securities with carrying values of $\$ 2.3$ billion as of December 31, 2018, and $\$ 2.4$ billion as of December 31, 2017 and 2016, were pledged to secure deposits of governmental entities and securities sold under agreements to repurchase.

The table below presents the gains and losses from the sales of investment securities for the years ended December 31, 2018, 2017, and 2016.

| (dollars in thousands) |  | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 7}$ |
| :--- | :--- | :---: | :---: |
| Gross Gains on Sales of Investment Securities | $\$$ | $\$$ | 12,467 |
| Gross Losses on Sales of Investment Securities | $\mathbf{\$}$ | $\mathbf{1 1 , 1 8 0}$ |  |
| Net Gains (Losses) on Sales of Investment Securities | $\$$ | $(3,938)$ | $(2,037)$ |

The losses during the year ended December 31, 2018, 2017, and 2016 were due to fees paid to the counterparties of the Company's prior Visa Class B share sale transactions which are expensed as incurred. In addition, losses during the year ended December 31, 2018 included $\$ 1.0$ million related to a change in the Visa Class B conversion ratio.

The income tax expense related to the Company's net realized gains (losses) on the sales of investment securities was $\$(1.0)$ million in 2018, $\$ 4.1$ million in 2017 and $\$ 4.0$ million in 2016.

The Company's investment securities in an unrealized loss position, segregated by continuous length of impairment, were as follows:

|  | Less Than 12 Months |  |  |  | 12 Months or Longer |  |  |  | Total |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (dollars in thousands) | Fair Value |  | Gross Unrealized Losses |  | Fair Value |  | Gross Unrealized Losses |  | Fair Value |  | Gross <br> Unrealized <br> Losses |  |
| December 31, 2018 |  |  |  |  |  |  |  |  |  |  |  |  |
| Available-for-Sales: |  |  |  |  |  |  |  |  |  |  |  |  |
| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 157,058 | \$ | (964) | \$ | 173,763 | \$ | $(1,613)$ | \$ | 330,821 | \$ | $(2,577)$ |
| Debt Securities Issued by States and Political Subdivisions |  | 38,138 |  | (59) |  | 156,772 |  | (972) |  | 194,910 |  | $(1,031)$ |
| Debt Securities Issued by Corporations |  | 59,770 |  | (231) |  | 163,371 |  | $(1,626)$ |  | 223,141 |  | $(1,857)$ |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 6,299 |  | (10) |  | 19,011 |  | (919) |  | 25,310 |  | (929) |
| Residential - U.S. Government-Sponsored Enterprises |  | - |  | - |  | 473,380 |  | $(12,563)$ |  | 473,380 |  | $(12,563)$ |
| Commercial - Government Agencies |  | - |  | - |  | 59,380 |  | $(4,484)$ |  | 59,380 |  | $(4,484)$ |
| Total Mortgage-Backed Securities |  | 6,299 |  | (10) |  | 551,771 |  | $(17,966)$ |  | 558,070 |  | $(17,976)$ |
| Total | \$ | 261,265 | \$ | $(1,264)$ | \$ | 1,045,677 | \$ | $(22,177)$ | \$ | 1,306,942 | \$ | $(23,441)$ |

Held-to-Maturity:

| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 99,440 | \$ | (237) | \$ | 134,239 | \$ | (856) | \$ | 233,679 | \$ | $(1,093)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Debt Securities Issued by Corporations |  | - |  | - |  | 95,511 |  | $(1,755)$ |  | 95,511 |  | $(1,755)$ |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 12,974 |  | (45) |  | 1,491,747 |  | $(51,728)$ |  | 1,504,721 |  | $(51,773)$ |
| Residential - U.S. Government-Sponsored Enterprises |  | - |  | - |  | 617,000 |  | $(20,259)$ |  | 617,000 |  | $(20,259)$ |
| Commercial - Government Agencies |  | 19,217 |  | (61) |  | 145,715 |  | $(5,116)$ |  | 164,932 |  | $(5,177)$ |
| Total Mortgage-Backed Securities |  | 32,191 |  | (106) |  | 2,254,462 |  | $(77,103)$ |  | 2,286,653 |  | $(77,209)$ |
| Total | \$ | 131,631 | \$ | (343) | \$ | 2,484,212 | \$ | $(79,714)$ | \$ | 2,615,843 | \$ | $(80,057)$ |

## December 31, 2017

| Available-for-Sales: |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 103,842 | \$ | (599) | \$ | 132,071 | \$ | (436) | \$ | 235,913 | \$ | $(1,035)$ |
| Debt Securities Issued by States and Political Subdivisions |  | 172,343 |  | $(1,032)$ |  | 734 |  | (10) |  | 173,077 |  | $(1,042)$ |
| Debt Securities Issued by Corporations |  | 12,985 |  | (15) |  | 192,927 |  | $(2,076)$ |  | 205,912 |  | $(2,091)$ |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 11,035 |  | (4) |  | 10,618 |  | $(1,033)$ |  | 21,653 |  | $(1,037)$ |
| Residential - U.S. Government-Sponsored Enterprises |  | 429,342 |  | $(5,720)$ |  | 150,887 |  | $(4,683)$ |  | 580,229 |  | $(10,403)$ |
| Commercial - Government Agencies |  | - |  | - |  | 68,747 |  | $(3,252)$ |  | 68,747 |  | $(3,252)$ |
| Total Mortgage-Backed Securities |  | 440,377 |  | $(5,724)$ |  | 230,252 |  | $(8,968)$ |  | 670,629 |  | $(14,692)$ |
| Total | \$ | 729,547 | \$ | $(7,370)$ | \$ | 555,984 | \$ | $(11,490)$ | \$ | 1,285,531 | \$ | $(18,860)$ |

## Held-to-Maturity:

| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 254,283 | \$ | (532) | \$ | 89,391 | \$ | (919) | \$ | 343,674 | \$ | $(1,451)$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Debt Securities Issued by Corporations |  | 25,490 |  | (110) |  | 58,869 |  | $(1,481)$ |  | 84,359 |  | $(1,591)$ |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | 1,030,472 |  | $(12,262)$ |  | 704,545 |  | $(24,785)$ |  | 1,735,017 |  | $(37,047)$ |
| Residential - U.S. Government-Sponsored Enterprises |  | 293,530 |  | $(3,106)$ |  | 339,232 |  | $(8,149)$ |  | 632,762 |  | $(11,255)$ |
| Commercial - Government Agencies |  | 497 |  | (5) |  | 82,288 |  | $(3,649)$ |  | 82,785 |  | $(3,654)$ |
| Total Mortgage-Backed Securities |  | 1,324,499 |  | $(15,373)$ |  | 1,126,065 |  | $(36,583)$ |  | 2,450,564 |  | $(51,956)$ |
| Total | \$ | 1,604,272 | \$ | $(16,015)$ | \$ | 1,274,325 | \$ | $(38,983)$ | \$ | 2,878,597 | \$ | $(54,998)$ |

The Company does not believe that the investment securities that were in an unrealized loss position as of December 31, 2018, which were comprised of 464 securities, represent an other-than-temporary impairment. 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. As of December 31, 2018, the gross unrealized losses reported for mortgage-backed securities were mostly related to investment securities issued by the Government National Mortgage Association. The Company does not intend to sell the investment securities that were in an unrealized loss position and it is not more likely than not that the Company will be required to sell the investment securities before recovery of their amortized cost bases, which may be at maturity.

Interest income from taxable and non-taxable investment securities for the years ended December 31, 2018, 2017, and 2016 were as follows:

|  | Year Ended December 31, |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| (dollars in thousands) |  | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 6}$ |  |
| Taxable | $\$$ | 115,947 | $\$$ | 108,787 | $\$$ |
| Non-Taxable | 180,541 |  |  |  |  |
| Total Interest Income from Investment Securities | $\$$ | 134,462 | $\$$ | 128,512 | $\$$ |

As of December 31, 2018, included in the Company's investment securities portfolio were debt securities issued by political subdivisions within the State of Hawaii of $\$ 451.1$ million, representing $56 \%$ of the total fair value of the Company's municipal debt securities. Of the entire Hawaii municipal bond portfolio, $96 \%$ were credit-rated Aa2 or better by Moody's while the remaining Hawaii municipal bonds were credit-rated A1 or better by at least one nationally recognized statistical rating organization. Of the Company's total Hawaii municipal bond holdings, $79 \%$ were general obligation issuances. As of December 31, 2018, there were no other holdings of municipal debt securities that were issued by a single state or political subdivision which comprised more than $10 \%$ of the total fair value of the Company's municipal debt securities.

As of December 31, 2018 and 2017, the carrying value of the Company’s Federal Home Loan Bank of Des Moines ("FHLB Des Moines") stock and Federal Reserve Bank stock was as follows:

|  | December 31, |  |
| :--- | ---: | ---: |
| (dollars in thousands) | $\mathbf{2 0 1 8}$ |  |
| Federal Home Loan Bank Stock | $\mathbf{2 0 1 7}$ |  |
| Federal Reserve Bank Stock | $\mathbf{1 5 , 0 0 0}$ | $\$$ |
| Total | 20,000 |  |

These securities can only be redeemed or sold at their par value and only to the respective issuing government-supported institution or to another member institution. The Company records these non-marketable equity securities as a component of other assets and periodically evaluates these securities for impairment. Management considers these non-marketable equity securities to be long-term investments. Accordingly, when evaluating these securities for impairment, management considers the ultimate recoverability of the par value rather than by recognizing temporary declines in value.

## Visa Class B Restricted Shares

In 2008, the Company received Visa Class B restricted shares as part of Visa's initial public offering. These shares are transferable only under limited circumstances until they can be converted into the publicly traded Class A common shares. This conversion will not occur until the settlement of certain litigation which is indemnified by Visa members, including the Company. Visa funded an escrow account from its initial public offering to settle these litigation claims. Should this escrow account not be sufficient to cover these litigation claims, Visa is entitled to fund additional amounts to the escrow account by reducing each member bank's Class B conversion ratio to unrestricted Class A shares. As of December 31, 2018, the conversion ratio was 1.6298 . See Note 17 Derivative Financial Instruments for more information.

The Company occasionally sells these Visa Class B shares to other financial institutions. Concurrent with every sale the Company enters into an agreement with the buyer that requires payment to the buyer in the event Visa further reduces the conversion ratio. Based on the existing transfer restriction and the uncertainty of the outcome of the Visa litigation mentioned above, the remaining 83,014 Class B shares ( 135,296 Class A equivalents) that the Company owns as of December 31, 2018 are carried at a zero cost basis.

## Note 4. Loans and Leases and the Allowance for Loan and Lease Losses

## Loans and Leases

The Company's loan and lease portfolio was comprised of the following as of December 31, 2018 and 2017:

| (dollars in thousands) | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  |  | 2017 |
| Commercial |  |  |  |  |
| Commercial and Industrial | \$ | 1,331,149 | \$ | 1,279,347 |
| Commercial Mortgage |  | 2,302,356 |  | 2,103,967 |
| Construction |  | 170,061 |  | 202,253 |
| Lease Financing |  | 176,226 |  | 180,931 |
| Total Commercial |  | 3,979,792 |  | 3,766,498 |
| Consumer |  |  |  |  |
| Residential Mortgage |  | 3,673,796 |  | 3,466,773 |
| Home Equity |  | 1,681,442 |  | 1,585,455 |
| Automobile |  | 658,133 |  | 528,474 |
| Other ${ }^{1}$ |  | 455,611 |  | 449,747 |
| Total Consumer |  | 6,468,982 |  | 6,030,449 |
| Total Loans and Leases | \$ | 10,448,774 | \$ | 9,796,947 |

${ }^{1}$ Comprised of other revolving credit, installment, and lease financing.
Total loans and leases were reported net of unearned income of $\$ 15.1$ million and $\$ 20.2$ million as of December 31, 2018 and 2017, respectively.
Commercial loans and residential mortgage loans of \$1.0 billion were pledged to secure an undrawn FRB line of credit as of December 31, 2018 and 2017.
As of December 31, 2018 and 2017, residential mortgage loans of $\$ 2.9$ billion, were pledged under a blanket pledge arrangement to secure FHLB advances. See Note 10 Other Debt for FHLB advances outstanding as of December 31, 2018 and 2017.

Net gains related to sales of residential mortgage loans, recorded as a component of mortgage banking income, were $\$ 1.5$ million, $\$ 4.9$ million, and $\$ 11.8$ million for the years ended December 31, 2018, 2017, and 2016, respectively. Net gains on sales of commercial loans were not material for the years ended December 31, 2018, 2017, and 2016.

Substantially all of the Company's lending activity is with customers located in Hawaii. A substantial portion of the Company's real estate loans are secured by real estate in Hawaii.

## Allowance for Loan and Lease Losses

The following presents by portfolio segment, the activity in the Allowance for the years ended December 31, 2018, 2017, and 2016. The following also presents by portfolio segment, the balance in the Allowance disaggregated on the basis of the Company's impairment measurement method and the related recorded investment in loans and leases as of December 31, 2018, 2017, and 2016.
(dollars in thousands) Commercial Consumer $\quad$ Total

## For the Year Ended December 31, 2018

| Balance at Beginning of Period | \$ | 65,822 | \$ | 41,524 | \$ | 107,346 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loans and Leases Charged-Off |  | $(1,505)$ |  | $(23,059)$ |  | $(24,564)$ |
| Recoveries on Loans and Leases Previously Charged-Off |  | 2,039 |  | 8,447 |  | 10,486 |
| Net Loans and Leases Recovered (Charged-Off) |  | 534 |  | $(14,612)$ |  | $(14,078)$ |
| Provision for Credit Losses |  | 518 |  | 12,907 |  | 13,425 |
| Balance at End of Period | \$ | 66,874 | \$ | 39,819 | \$ | 106,693 |

As of December 31, 2018
Allowance for Loan and Lease Losses:

| Individually Evaluated for Impairment | $\$$ | 222 | $\$$ | 3,754 | $\$$ |
| :--- | :--- | ---: | ---: | ---: | ---: |
| Collectively Evaluated for Impairment |  | 66,652 | 3,976 |  |  |
| Total | $\$$ | 66,874 | $\$$ | 39,819 | $\$$ |
| Recorded Investment in Loans and Leases: | $\$$ |  |  |  |  |
| Individually Evaluated for Impairment | 12,298 | $\$$ | 42,327 | $\$$ | 54,625 |
| Collectively Evaluated for Impairment | $3,967,494$ | $6,426,655$ | $10,394,149$ |  |  |
| Total | $\$$ | $3,979,792$ | $\$$ | $6,468,982$ | $\$$ |

For the Year Ended December 31, 2017
Allowance for Loan and Lease Losses:

| Balance at Beginning of Period | \$ | 65,680 | \$ | 38,593 | \$ | 104,273 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loans and Leases Charged-Off |  | $(1,408)$ |  | $(21,847)$ |  | $(23,255)$ |
| Recoveries on Loans and Leases Previously Charged-Off |  | 1,485 |  | 7,943 |  | 9,428 |
| Net Loans and Leases Recovered (Charged-Off) |  | 77 |  | $(13,904)$ |  | $(13,827)$ |
| Provision for Credit Losses |  | 65 |  | 16,835 |  | 16,900 |
| Balance at End of Period | \$ | 65,822 | \$ | 41,524 | \$ | 107,346 |

As of December 31, 2017

| Allowance for Loan and Lease Losses: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Individually Evaluated for Impairment | \$ | 141 | \$ | 3,775 | \$ | 3,916 |
| Collectively Evaluated for Impairment |  | 65,681 |  | 37,749 |  | 103,430 |
| Total | \$ | 65,822 | \$ | 41,524 | \$ | 107,346 |
| Recorded Investment in Loans and Leases: |  |  |  |  |  |  |
| Individually Evaluated for Impairment | \$ | 20,216 | \$ | 41,002 | \$ | 61,218 |
| Collectively Evaluated for Impairment |  | 3,746,282 |  | 5,989,447 |  | 9,735,729 |
| Total | \$ | 3,766,498 | \$ | 6,030,449 | \$ | 9,796,947 |

For the Year Ended December 31, 2016

| Balance at Beginning of Period | \$ | 60,714 | \$ | 42,166 | \$ | 102,880 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Loans and Leases Charged-Off |  | (865) |  | $(17,644)$ |  | $(18,509)$ |
| Recoveries on Loans and Leases Previously Charged-Off |  | 8,137 |  | 7,015 |  | 15,152 |
| Net Loans and Leases Recovered (Charged-Off) |  | 7,272 |  | $(10,629)$ |  | $(3,357)$ |
| Provision for Credit Losses |  | $(2,306)$ |  | 7,056 |  | 4,750 |
| Balance at End of Period | \$ | 65,680 | \$ | 38,593 | \$ | 104,273 |

## As of December 31, 2016

Allowance for Loan and Lease Losses:

| Individually Evaluated for Impairment | \$ | 45 | \$ | 3,510 | \$ | 3,555 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Collectively Evaluated for Impairment |  | 65,635 |  | 35,083 |  | 100,718 |
| Total | \$ | 65,680 | \$ | 38,593 | \$ | 104,273 |
| Recorded Investment in Loans and Leases |  |  |  |  |  |  |
| Individually Evaluated for Impairment | \$ | 21,572 | \$ | 39,126 | \$ | 60,698 |
| Collectively Evaluated for Impairment |  | 3,596,120 |  | 5,292,967 |  | 8,889,087 |

## Credit Quality Indicators

The Company uses several credit quality indicators to manage credit risk in an ongoing manner. The Company uses an internal credit risk rating system that categorizes loans and leases into pass, special mention, or classified categories. Credit risk ratings are applied individually to those classes of loans and leases that have significant or unique credit characteristics that benefit from a case-by-case evaluation. These are typically loans and leases to businesses or individuals in the classes which comprise the commercial portfolio segment. Groups of loans and leases that are underwritten and structured using standardized criteria and characteristics, such as statistical models (e.g., credit scoring or payment performance), are typically risk-rated and monitored collectively. These are typically loans and leases to individuals in the classes which comprise the consumer portfolio segment.

The following are the definitions of the Company's credit quality indicators:
Pass: Loans and leases in all classes within the commercial and consumer portfolio segments that are not adversely rated, are contractually current as to principal and interest, and are otherwise in compliance with the contractual terms of the loan or lease agreement. Management believes that there is a low likelihood of loss related to those loans and leases that are considered Pass.

Special Mention: Loans and leases that have potential weaknesses that deserve management's close attention. If not addressed, these potential weaknesses may result in deterioration of the repayment prospects for the loan or lease. Management believes that there is a moderate likelihood of some loss related to those loans and leases that are considered Special Mention.

Classified: Loans and leases in the classes within the commercial portfolio segment that are inadequately protected by the sound worth and paying capacity of the borrower or of the collateral pledged, if any. Classified loans and leases are also those in the classes within the consumer portfolio segment that are past due 90 days or more as to principal or interest. Residential mortgage loans that are past due 90 days or more as to principal or interest may be considered pass if the Company is in the process of collection and the current loan-to-value ratio is $60 \%$ or less. Home equity loans that are past due 90 days or more as to principal or interest may be considered pass if the Company is in the process of collection, the first mortgage is with the Company, and the current combined loan-to-value ratio is $60 \%$ or less. Residential mortgage and home equity loans may be current as to principal and interest, but may be considered Classified for a period of up to six months following a loan modification. Following a period of demonstrated performance in accordance with the modified contractual terms, the loan may be removed from classified status. Management believes that there is a distinct possibility that the Company will sustain some loss if the deficiencies related to Classified loans and leases are not corrected in a timely manner.

The Company's credit quality indicators are periodically updated on a case-by-case basis. The following presents by class and by credit quality indicator, the recorded investment in the Company's loans and leases as of December 31, 2018 and 2017.

| (dollars in thousands) | December 31, 2018 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Commercial and Industrial |  | Commercial Mortgage |  | Construction |  | LeaseFinancing |  | TotalCommercial |  |
| Pass | \$ | 1,302,278 | \$ | 2,256,128 | \$ | 168,740 | \$ | 175,223 | \$ | 3,902,369 |
| Special Mention |  | 17,688 |  | 30,468 |  | - |  | 5 |  | 48,161 |
| Classified |  | 11,183 |  | 15,760 |  | 1,321 |  | 998 |  | 29,262 |
| Total | \$ | 1,331,149 | \$ | 2,302,356 | \$ | 170,061 | \$ | 176,226 | \$ | 3,979,792 |


| (dollars in thousands) | Residential Mortgage |  |  | Home Equity | Automobile |  | Other ${ }^{1}$ |  |  | Total Consumer |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pass | \$ | 3,668,475 | \$ | 1,677,193 |  | 657,620 | \$ | 454,697 | \$ | 6,457,985 |
| Classified |  | 5,321 |  | 4,249 |  | 513 |  | 914 |  | 10,997 |
| Total | \$ | 3,673,796 | \$ | 1,681,442 | \$ | 658,133 | \$ | 455,611 | \$ | 6,468,982 |
| Total Recorded Investment in Loans and Leases |  |  |  |  |  |  |  |  | \$ | 10,448,774 |


| (dollars in thousands) | December 31, 2017 |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Commercial and Industrial |  | Commercial Mortgage |  | Construction |  | LeaseFinancing |  | TotalCommercial |  |
| Pass | \$ | 1,234,738 | \$ | 2,046,745 | \$ | 198,926 | \$ | 180,522 | \$ | 3,660,931 |
| Special Mention |  | 15,394 |  | 35,762 |  | 6 |  | 11 |  | 51,173 |
| Classified |  | 29,215 |  | 21,460 |  | 3,321 |  | 398 |  | 54,394 |
| Total | \$ | 1,279,347 | \$ | 2,103,967 | \$ | 202,253 | \$ | 180,931 | \$ | 3,766,498 |


| (dollars in thousands) | Residential Mortgage |  |  | Home Equity | Automobile |  | Other ${ }^{1}$ |  |  | $\begin{array}{r} \text { Total } \\ \text { Consumer } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Pass | \$ | 3,457,531 | \$ | 1,580,917 | \$ | 527,587 | \$ | 449,008 | \$ | 6,015,043 |
| Classified |  | 9,242 |  | 4,538 |  | 887 |  | 739 |  | 15,406 |
| Total | \$ | 3,466,773 | \$ | 1,585,455 | \$ | 528,474 | \$ | 449,747 | \$ | 6,030,449 |
| Total Recorded Investment in Loans and Leases |  |  |  |  |  |  |  |  | \$ | 9,796,947 |

[^6]
## Aging Analysis

The following presents by class, an aging analysis of the Company's loan and lease portfolio as of December 31, 2018 and 2017.

| (dollars in thousands) |  | $\begin{gathered} 30-59 \\ \text { Days } \\ \text { Past Due } \end{gathered}$ |  | $\begin{gathered} \mathbf{6 0 - 8 9} \\ \text { Days } \\ \text { Past Due } \end{gathered}$ |  | Past Due 90 Days or More |  | NonAccrual |  | Total <br> Past Due and Non-Accrual |  | Current |  | Total Loans and Leases |  | crual <br> s and <br> that <br> rent ${ }^{2}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| As of December 31, 2018 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Commercial |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Commercial and Industrial | \$ | 3,653 | \$ | 118 | \$ | 10 | \$ | 542 | \$ | 4,323 | \$ | 1,326,826 | \$ | 1,331,149 | \$ | 515 |
| Commercial Mortgage |  | 561 |  | - |  | - |  | 2,040 |  | 2,601 |  | 2,299,755 |  | 2,302,356 |  | 2,040 |
| Construction |  | - |  | - |  | - |  | - |  | - |  | 170,061 |  | 170,061 |  | - |
| Lease Financing |  | - |  | - |  | - |  | - |  | - |  | 176,226 |  | 176,226 |  | - |
| Total Commercial |  | 4,214 |  | 118 |  | 10 |  | 2,582 |  | 6,924 |  | 3,972,868 |  | 3,979,792 |  | 2,555 |
| Consumer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential Mortgage |  | 5,319 |  | 638 |  | 2,446 |  | 5,321 |  | 13,724 |  | 3,660,072 |  | 3,673,796 |  | 1,203 |
| Home Equity |  | 3,323 |  | 1,581 |  | 2,684 |  | 3,671 |  | 11,259 |  | 1,670,183 |  | 1,681,442 |  | 765 |
| Automobile |  | 12,372 |  | 2,240 |  | 513 |  | - |  | 15,125 |  | 643,008 |  | 658,133 |  | - |
| Other 1 |  | 2,913 |  | 1,245 |  | 914 |  | - |  | 5,072 |  | 450,539 |  | 455,611 |  | - |
| Total Consumer |  | 23,927 |  | 5,704 |  | 6,557 |  | 8,992 |  | 45,180 |  | 6,423,802 |  | 6,468,982 |  | 1,968 |
| Total | \$ | 28,141 | \$ | 5,822 | \$ | 6,567 | \$ | 11,574 | \$ | 52,104 | \$ | 10,396,670 | \$ | 10,448,774 | \$ | 4,523 |

As of December 31, 2017

| Commercial |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial and Industrial | \$ | 4,196 | \$ | 641 | \$ | - | \$ | 448 | \$ | 5,285 | \$ | 1,274,062 | \$ | 1,279,347 | \$ | 313 |
| Commercial Mortgage |  | 187 |  | 404 |  | - |  | 1,398 |  | 1,989 |  | 2,101,978 |  | 2,103,967 |  | 465 |
| Construction |  | - |  | - |  | - |  | - |  | - |  | 202,253 |  | 202,253 |  | - |
| Lease Financing |  | - |  | - |  | - |  | - |  | - |  | 180,931 |  | 180,931 |  | - |
| Total Commercial |  | 4,383 |  | 1,045 |  | - |  | 1,846 |  | 7,274 |  | 3,759,224 |  | 3,766,498 |  | 778 |
| Consumer |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Residential Mortgage |  | 7,815 |  | 2,008 |  | 2,703 |  | 9,243 |  | 21,769 |  | 3,445,004 |  | 3,466,773 |  | 806 |
| Home Equity |  | 2,532 |  | 2,736 |  | 1,624 |  | 3,991 |  | 10,883 |  | 1,574,572 |  | 1,585,455 |  | 1,312 |
| Automobile |  | 11,728 |  | 2,232 |  | 886 |  | - |  | 14,846 |  | 513,628 |  | 528,474 |  | - |
| Other 1 |  | 3,007 |  | 1,639 |  | 1,934 |  | - |  | 6,580 |  | 443,167 |  | 449,747 |  | - |
| Total Consumer |  | 25,082 |  | 8,615 |  | 7,147 |  | 13,234 |  | 54,078 |  | 5,976,371 |  | 6,030,449 |  | 2,118 |
| Total | \$ | 29,465 | \$ | 9,660 | \$ | 7,147 | \$ | 15,080 | \$ | 61,352 | \$ | 9,735,595 | \$ | 9,796,947 | \$ | 2,896 |

[^7]${ }^{2}$ Represents non-accrual loans that are not past due 30 days or more; however, full payment of principal and interest is still not expected.

## Impaired Loans

The following presents by class, information related to impaired loans as of December 31, 2018 and 2017.

| (dollars in thousands) | Recorded <br> Investment |  | Unpaid Principal Balance |  | Related <br> Allowance for Loan Losses |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| December 31, 2018 |  |  |  |  |  |  |
| Impaired Loans with No Related Allowance Recorded: |  |  |  |  |  |  |
| Commercial |  |  |  |  |  |  |
| Commercial and Industrial | \$ | 4,587 | \$ | 4,587 | \$ | - |
| Commercial Mortgage |  | 2,712 |  | 6,212 |  | - |
| Construction |  | 1,321 |  | 1,321 |  | - |
| Total Commercial |  | 8,620 |  | 12,120 |  | - |
| Total Impaired Loans with No Related Allowance Recorded | \$ | 8,620 | \$ | 12,120 | \$ | - |
|  |  |  |  |  |  |  |
| Impaired Loans with an Allowance Recorded: |  |  |  |  |  |  |
| Commercial |  |  |  |  |  |  |
| Commercial and Industrial | \$ | 1,856 | \$ | 2,099 | \$ | 130 |
| Commercial Mortgage |  | 1,822 |  | 1,822 |  | 92 |
| Total Commercial |  | 3,678 |  | 3,921 |  | 222 |
| Consumer |  |  |  |  |  |  |
| Residential Mortgage |  | 19,753 |  | 23,635 |  | 3,051 |
| Home Equity |  | 3,359 |  | 3,359 |  | 350 |
| Automobile |  | 17,117 |  | 17,117 |  | 296 |
| Other ${ }^{1}$ |  | 2,098 |  | 2,098 |  | 57 |
| Total Consumer |  | 42,327 |  | 46,209 |  | 3,754 |
| Total Impaired Loans with an Allowance Recorded | \$ | 46,005 | \$ | 50,130 | \$ | 3,976 |
|  |  |  |  |  |  |  |
| Impaired Loans: |  |  |  |  |  |  |
| Commercial | \$ | 12,298 | \$ | 16,041 | \$ | 222 |
| Consumer |  | 42,327 |  | 46,209 |  | 3,754 |
| Total Impaired Loans | \$ | 54,625 | \$ | 62,250 | \$ | 3,976 |

December 31, 2017
Impaired Loans with No Related Allowance Recorded:

| Commercial |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial and Industrial | \$ | 8,094 | \$ | 15,747 | \$ | - |
| Commercial Mortgage |  | 8,696 |  | 12,196 |  | - |
| Construction |  | 1,415 |  | 1,415 |  | - |
| Total Commercial |  | 18,205 |  | 29,358 |  | - |
| Total Impaired Loans with No Related Allowance Recorded | \$ | 18,205 | \$ | 29,358 | \$ | - |


| Impaired Loans with an Allowance Recorded: |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial |  |  |  |  |  |  |
| Commercial and Industrial | \$ | 811 | \$ | 811 | \$ | 21 |
| Commercial Mortgage |  | 1,200 |  | 1,200 |  | 120 |
| Total Commercial |  | 2,011 |  | 2,011 |  | 141 |
| Consumer |  |  |  |  |  |  |
| Residential Mortgage |  | 21,581 |  | 26,324 |  | 3,118 |
| Home Equity |  | 1,965 |  | 1,965 |  | 276 |
| Automobile |  | 14,811 |  | 14,811 |  | 305 |
| Other ${ }^{1}$ |  | 2,645 |  | 2,645 |  | 76 |
| Total Consumer |  | 41,002 |  | 45,745 |  | 3,775 |
| Total Impaired Loans with an Allowance Recorded | \$ | 43,013 | \$ | 47,756 | \$ | 3,916 |

## Impaired Loans:

| Commercial | $\$$ | 20,216 | $\$$ | 31,369 |
| :--- | :--- | :--- | :--- | :--- |
| Consumer | $\$ 1,002$ | 45,745 |  |  |

The following presents by class, information related to the average recorded investment and interest income recognized on impaired loans for the years ended December 31, 2018 and 2017.

|  | Year Ended December 31, 2018 |  |  |  | Year Ended December 31, 2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (dollars in thousands) | Average Recorded Investment |  | InterestIncomeRecognized |  | Average Recorded Investment |  | InterestIncomeRecognized |  |
| Impaired Loans with No Related Allowance Recorded: |  |  |  |  |  |  |  |  |
| Commercial |  |  |  |  |  |  |  |  |
| Commercial and Industrial | \$ | 6,342 | \$ | 310 | \$ | 8,810 | \$ | 351 |
| Commercial Mortgage |  | 4,642 |  | 160 |  | 9,251 |  | 299 |
| Construction |  | 1,360 |  | 69 |  | 1,464 |  | 94 |
| Total Commercial |  | 12,344 |  | 539 |  | 19,525 |  | 744 |
| Total Impaired Loans with No Related Allowance Recorded | \$ | 12,344 | \$ | 539 | \$ | 19,525 | \$ | 744 |

Impaired Loans with an Allowance Recorded:

| Commercial |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Commercial and Industrial | \$ | 1,475 | \$ | 100 | \$ | 709 | \$ | 42 |
| Commercial Mortgage |  | 623 |  | 25 |  | 690 |  | 54 |
| Total Commercial |  | 2,098 |  | 125 |  | 1,399 |  | 96 |
| Consumer |  |  |  |  |  |  |  |  |
| Residential Mortgage |  | 20,324 |  | 1,080 |  | 22,981 |  | 845 |
| Home Equity |  | 2,676 |  | 121 |  | 1,707 |  | 82 |
| Automobile |  | 16,190 |  | 1,116 |  | 12,235 |  | 825 |
| Other ${ }^{1}$ |  | 2,624 |  | 215 |  | 2,571 |  | 215 |
| Total Consumer |  | 41,814 |  | 2,532 |  | 39,494 |  | 1,967 |
| Total Impaired Loans with an Allowance Recorded | \$ | 43,912 | \$ | 2,657 | \$ | 40,893 | \$ | 2,063 |
|  |  |  |  |  |  |  |  |  |
| Impaired Loans: |  |  |  |  |  |  |  |  |
| Commercial | \$ | 14,442 | \$ | 664 | \$ | 20,924 | \$ | 840 |
| Consumer |  | 41,814 |  | 2,532 |  | 39,494 |  | 1,967 |
| Total Impaired Loans | \$ | 56,256 | \$ | 3,196 | \$ | 60,418 | \$ | 2,807 |

${ }^{1}$ Comprised of other revolving credit and installment financing.
For the year ended December 31, 2016, the average recorded investment in impaired loans was $\$ 62.1$ million and the interest income recognized on impaired loans was $\$ 2.7$ million. For the years ended December 31, 2018, 2017, and 2016, the amount of interest income recognized by the Company within the period that the loans were impaired were primarily related to loans modified in a troubled debt restructuring that were on accrual status. For the years ended December 31, 2018, 2017, and 2016, the amount of interest income recognized using a cash-basis method of accounting during the time within that period that the loans were impaired was not material.

## Modifications

A modification of a loan constitutes a troubled debt restructuring ("TDR") when the Company for economic or legal reasons related to a borrower's financial difficulties grants a concession to the borrower that it would not otherwise consider. Loans modified in a TDR were $\$ 54.0$ million and $\$ 60.1$ million as of December 31, 2018 and 2017, respectively. As of December 31, 2018, there were $\$ 0.2$ million commitments to lend additional funds on loans modified in a TDR. As of December 31, 2017, there were $\$ 1.5$ million commitments to lend additional funds on loans modified in a TDR.

The Company offers various types of concessions when modifying a loan or lease. Commercial and industrial loans modified in a TDR often involve temporary interest-only payments, term extensions, and converting revolving credit lines to term loans. Additional collateral, a co-borrower, or a guarantor is often requested. Commercial mortgage and construction loans modified in a TDR often involve reducing the interest rate for the remaining term of the loan, extending the maturity date at an interest rate lower than the current market rate for new debt with similar risk, or substituting or adding a co-borrower or guarantor. Construction loans modified in a TDR may also involve extending the interest-only payment period. Residential mortgage loans modified in a TDR generally include a lower interest rate and the loan being fully amortized for up to 40 years from the modification effective date. In some cases, the Company may forbear a portion of the unpaid principal balance with a balloon payment due upon maturity or pay-off of the loan. Land loans are also included in the class of residential mortgage loans. Land loans are typically structured as interest-only monthly payments with a balloon payment due at maturity. Land loan modifications usually involve extending the interest-only payments up to an additional five years with a balloon payment due at maturity, or re-amortizing the remaining balance over a period up to 360 months. Interest rates are not changed for land loan modifications. Home equity modifications are made infrequently and uniquely designed to meet the specific needs of each borrower. Automobile loans modified in a TDR are primarily comprised of loans where the Company has lowered monthly payments by extending the term.

Loans modified in a TDR are typically already on non-accrual status and partial charge-offs have in some cases already been taken against the outstanding loan balance. As a result, loans modified in a TDR may have the financial effect of increasing the specific Allowance associated with the loan. An Allowance for impaired commercial and consumer loans that have been modified in a TDR is measured based on the present value of expected future cash flows discounted at the loan's effective interest rate, the loan's observable market price, or the estimated fair value of the collateral, less any selling costs, if the loan is collateral dependent. Management exercises significant judgment in developing these estimates.

The following presents by class, information related to loans modified in a TDR during the years ended December 31, 2018 and 2017.

|  | Loans Modified as a TDR for the Year Ended December 31, 2018 |  |  |  |  | Loans Modified as a TDR for the Year Ended December 31, 2017 |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Troubled Debt Restructurings (dollars in thousands) | Number of Contracts |  | Recorded Investment (as of period end) ${ }^{1}$ |  | Increase in Allowance (as of period end) | Number of Contracts |  | Recorded Investment (as of period end) ${ }^{1}$ |  | Increase in Allowance (as of period end) |
| Commercial |  |  |  |  |  |  |  |  |  |  |
| Commercial and Industrial | 12 | \$ | 1,449 | \$ | 96 | 13 | \$ | 7,299 | \$ | 11 |
| Commercial Mortgage | 1 |  | 1,650 |  | 74 | 4 |  | 2,336 |  | 93 |
| Total Commercial | 13 |  | 3,099 |  | 170 | 17 |  | 9,635 |  | 104 |
| Consumer |  |  |  |  |  |  |  |  |  |  |
| Residential Mortgage | 6 |  | 1,458 |  | 200 | 2 |  | 368 |  | 1 |
| Home Equity | 9 |  | 1,438 |  | 77 | 4 |  | 604 |  | 13 |
| Automobile | 366 |  | 7,400 |  | 128 | 424 |  | 8,623 |  | 177 |
| Other ${ }^{2}$ | 138 |  | 927 |  | 25 | 171 |  | 1,395 |  | 35 |
| Total Consumer | 519 |  | 11,223 |  | 430 | 601 |  | 10,990 |  | 226 |
| Total | 532 | \$ | 14,322 | \$ | 600 | 618 | \$ | 20,625 | \$ | 330 |

[^8]2 Comprised of other revolving credit and installment financing.

The following presents by class, loans modified in a TDR that defaulted during the year ended December 31, 2018 and 2017, and within twelve months of their modification date. A TDR is considered to be in default once it becomes 60 days or more past due following a modification.

| TDRs that Defaulted During the Period, Within Twelve Months of their Modification Date (dollars in thousands) | Year Ended December 31, 2018 |  |  | Year Ended December 31, 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of Contracts |  | Recorded <br> Investment(as of period end) ${ }^{1}$ | Number of Contracts |  | Recorded <br> Investment$\left(\right.$ as of period end) ${ }^{1}$ |
| Commercial |  |  |  |  |  |  |
| Commercial and Industrial | 1 | \$ | 3 | 1 | \$ | 48 |
| Commercial Mortgage | - |  | - | 1 |  | 341 |
| Total Commercial | 1 |  | 3 | 2 |  | 389 |
| Consumer |  |  |  |  |  |  |
| Residential Mortgage | - |  | - | 1 |  | 94 |
| Home Equity | - |  | - | 1 |  | 237 |
| Automobile | 38 |  | 680 | 28 |  | 515 |
| Other ${ }^{2}$ | 34 |  | 194 | 36 |  | 208 |
| Total Consumer | 72 |  | 874 | 66 |  | 1,054 |
| Total | 73 | \$ | 877 | 68 | \$ | 1,443 |

1 The period end balances reflect all paydowns and charge-offs since the modification date. TDRs fully paid off, charged off, or foreclosed upon by period end are not included.
2 Comprised of other revolving credit and installment financing.

Loans modified in a TDR are closely monitored for delinquency as an early indicator of possible future default. If loans modified in a TDR subsequently default, the Company evaluates the loan for possible further impairment. The specific Allowance associated with the loan may be increased, adjustments may be made in the allocation of the Allowance, or partial charge-offs may be taken to further write-down the carrying value of the loan.

## Foreclosure Proceedings

Consumer mortgage loans collateralized by residential real estate property that are in the process of foreclosure totaled $\$ 4.0$ million as of December 31, 2018.

## Note 5. Mortgage Servicing Rights

The Company's portfolio of residential mortgage loans serviced for third parties was $\$ 2.9$ billion as of December 31, 2018 and 2017, and $\$ 2.7$ billion as of December 31, 2016. Substantially all of these loans were originated by the Company and sold to third parties on a non-recourse basis with servicing rights retained. These retained servicing rights are recorded as a servicing asset and are initially recorded at fair value (see Note 21 Fair Value of Assets and Liabilities for more information). Changes to the balance of mortgage servicing rights are recorded in mortgage banking income in the Company's consolidated statements of income.

The Company's mortgage servicing activities include collecting principal, interest, and escrow payments from borrowers; making tax and insurance payments on behalf of borrowers; monitoring delinquencies and executing foreclosure proceedings; and accounting for and remitting principal and interest payments to investors. Servicing income, including late and ancillary fees, was $\$ 7.3$ million, $\$ 7.1$ million, and $\$ 6.9$ million for the years ended December 31, 2018, 2017, and 2016, respectively. Servicing income is recorded in mortgage banking income in the Company's consolidated statements of income. The Company's residential mortgage investor loan servicing portfolio is primarily comprised of fixed rate loans concentrated in Hawaii.

For the years ended December 31, 2018, 2017, and 2016, the change in the fair value of the Company's mortgage servicing rights accounted for under the fair value measurement method was as follows:

| (dollars in thousands) | $\mathbf{2 0 1 8}$ |  | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 6}$ |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Balance at Beginning of Year | $\$$ | 1,454 | $\$$ | 1,655 | $\$$ |
| Changes in Fair Value: |  |  |  |  |  |
| Due to Payoffs |  | $(164)$ | $(201)$ |  |  |
| Total Changes in Fair Value of Mortgage Servicing Rights | $(164)$ | $(201)$ | $(315)$ |  |  |
| Balance at End of Year | 1,290 | $\$$ | 1,454 | $\$$ | 1,655 |

For the years ended December 31, 2018, 2017, and 2016, the change in the carrying value of the Company's mortgage servicing rights accounted for under the amortization method, net of valuation allowance was as follows:

| (dollars in thousands) | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Balance at Beginning of Year | \$ | 23,168 | \$ | 22,008 | \$ | 21,032 |
| Servicing Rights that Resulted From Asset Transfers |  | 2,470 |  | 3,976 |  | 3,847 |
| Amortization |  | $(2,618)$ |  | $(2,816)$ |  | $(2,892)$ |
| Valuation Allowance Recovery (Provision) |  | - |  | - |  | 21 |
| Balance at End of Year | \$ | 23,020 | \$ | 23,168 | \$ | 22,008 |
|  |  |  |  |  |  |  |
| Valuation Allowance: |  |  |  |  |  |  |
| Balance at Beginning of Year | \$ | - | \$ | - | \$ | (21) |
| Valuation Allowance Recovery (Provision) |  | - |  | - |  | 21 |
| Balance at End of Year | \$ | - | \$ | - | \$ | - |
|  |  |  |  |  |  |  |
| Fair Value: |  |  |  |  |  |  |
| Balance at Beginning of Year | \$ | 26,716 | \$ | 25,148 | \$ | 24,804 |
| Balance at End of Year | \$ | 29,218 | \$ | 26,716 | \$ | 25,148 |

The key data and assumptions used in estimating the fair value of the Company's mortgage servicing rights as of December 31, 2018 and 2017 were as follows:

|  | December 31, |  |
| :--- | :---: | :---: |
|  | $\mathbf{2 0 1 8}$ |  |
| Weighted-Average Constant Prepayment Rate ${ }^{1}$ | $\mathbf{2 0 1 7}$ |  |
| Weighted-Average Life (in years) | $8.01 \%$ | 7.89 |
| Weighted-Average Note Rate | $\mathbf{\%}$ |  |
| Weighted-Average Discount Rate ${ }^{2}$ | 4.06 |  |

${ }^{1}$ Represents annualized loan prepayment rate assumption.
2 Derived from multiple interest rate scenarios that incorporate a spread to a market yield curve and market volatilities.
A sensitivity analysis of the Company's fair value of mortgage servicing rights to changes in certain key assumptions as of December 31, 2018 and 2017 is presented in the following table.

| (dollars in thousands) | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  |
| Constant Prepayment Rate |  |  |  |  |
| Decrease in fair value from 25 basis points ("bps") adverse change | \$ | (361) | \$ | (332) |
| Decrease in fair value from 50 bps adverse change |  | (716) |  | (657) |
| Discount Rate |  |  |  |  |
| Decrease in fair value from 25 bps adverse change |  | (325) |  | (289) |
| Decrease in fair value from 50 bps adverse change |  | (643) |  | (572) |

This analysis generally cannot be extrapolated because the relationship of a change in one key assumption to the change in the fair value of the Company's mortgage servicing rights usually is not linear. Also, the effect of changing one key assumption without changing other assumptions is not realistic.

## Note 6. Premises and Equipment

The components of the Company's premises and equipment as of December 31, 2018 and 2017 were as follows:


Depreciation and amortization (including capital lease amortization) included in noninterest expense was $\$ 14.4$ million, $\$ 13.0$ million, and $\$ 12.9$ million for the years ended December 31, 2018, 2017, and 2016, respectively.

There was no impairment of the Company's premises and equipment for the years ended December 31, 2018, 2017, and 2016.

## Note 7. Other Assets

The components of the Company's other assets as of December 31, 2018 and 2017 were as follows:

|  | December 31, |
| :--- | ---: |
| (dollars in thousands) | $\mathbf{2 0 1 8}$ |
| Federal Home Loan Bank and Federal Reserve Bank Stock | $\mathbf{2 0 1 7}$ |
| Derivative Financial Instruments | $\mathbf{3 5 , 8 5 8}$ |
| Low-Income Housing and Other Equity Investments | $\mathbf{\$}$ |
| Deferred Compensation Plan Assets | $\mathbf{4 0 , 6 4 5}$ |
| Prepaid Expenses | $\mathbf{1 4 , 6 0 4}$ |
| Accounts Receivable ${ }^{1}$ | 85,860 |
| Other ${ }^{1}$ | 31,871 |
| Total Other Assets | 87,632 |

${ }^{1}$ Certain prior period information has been reclassified to conform to current presentation.

## Note 8. Deposits

## Time Deposits

As of December 31, 2018 and 2017, the Company's total time deposits were $\$ 1.7$ billion. As of December 31, 2018, the contractual maturities of these time deposits were as follows:

| (dollars in thousands) |  |
| :--- | ---: | ---: |
| 2019 | $\mathbf{A m o u n t}$ |
| 2020 | $1,441,580$ |
| 2021 | 119,894 |
| 2022 | 115,528 |
| 2023 | 32,881 |
| Thereafter | 28,035 |
| Total | 7,604 |

The amount of time deposits with balances of $\$ 100,000$ or more was $\$ 1.5$ billion and $\$ 1.4$ billion as of December 31, 2018 and 2017, respectively. As of December 31, 2018, the contractual maturities of these time deposits were as follows:

| (dollars in thousands) | Amount |
| :--- | ---: |
| Three Months or Less | 756,146 |
| Over Three Months through Six Months | 197,485 |
| Over Six Months through Twelve Months | 352,539 |
| Over Twelve Months | 191,839 |
| Total | $1,498,009$ |

## Public Deposits

As of December 31, 2018 and 2017, deposits of governmental entities of $\$ 1.1$ billion and $\$ 1.3$ billion, respectively, required collateralization by acceptable investment securities of the Company.

## Note 9. Borrowings

Details of the Company's short-term borrowings (original term of one year or less) as of December 31, 2018 and 2017 were as follows:

|  | December 31, |  |
| :--- | :---: | :---: |
| (dollars in thousands) | $\mathbf{2 0 1 8}$ |  |
| Securities Sold Under Agreements to Repurchase (short-term) ${ }^{\mathbf{1}}$ |  |  |
| Amounts Outstanding | $\$$ | 4,196 |
| Weighted-Average Interest Rate | $\$$ | 1,603 |

 2018, and 2017, respectively, and long-term repurchase agreements with private institutions of $\$ 500.0$ million as of December 31 , 2018 and 2017.

The Company's total securities sold under agreements to repurchase were $\$ 504.3$ million and $\$ 505.3$ million as of December 31, 2018 and 2017, respectively. As of December 31, 2018, all of our repurchase agreements were at fixed interest rates.

As of December 31, 2018, long-term repurchase agreements (original term over one year) placed with government entities were $\$ 0.1$ million with a weightedaverage interest rate of $1.30 \%$ and a weighted-average maturity of 56 days.

As of December 31, 2018, long-term repurchase agreements placed with private institutions were $\$ 500.0$ million with a weighted-average interest rate of $3.64 \%$. Remaining terms ranged from 2020 to 2022 with a weighted-average maturity of 2.6 years. Some of our repurchase agreements with private institutions may be terminated at earlier specified dates by the private institution or in some cases by either the private institution or the Company. If all such agreements were to terminate at the earliest possible date, the weighted-average maturity for our repurchase agreements with private institutions would decrease to 2.0 years.

## Note 10. Other Debt

The Company's other debt as of December 31, 2018 and 2017 were as follows:

|  | December 31, |  |  |
| :--- | ---: | ---: | ---: |
| (dollars in thousands) | $\mathbf{2}$ |  |  |
| Federal Home Loan Bank Advances | $\$ 125,000$ | $\$$ | 250,000 |
| Capital Lease Obligations | $\mathbf{2 0 1 8}$ |  |  |
| Total | $\$$ | 135,643 | 10,716 |

As a member of the FHLB, the Bank may borrow funds from the FHLB in amounts up to $45 \%$ of the Bank's total assets, provided the Bank is able to pledge an adequate amount of qualified assets to secure the borrowings. As of December 31, 2018, FHLB advances totaled $\$ 125.0$ million with a weighted-average interest rate of $1.93 \%$ and maturity dates ranging from 2019 to 2020. As of December 31, 2018, the Company had a remaining line of credit with the FHLB of $\$ 2.2$ billion. See Note 4 Loans and Leases and the Allowance for Loan and Lease Losses for loans pledged to the FHLB as of December 31, 2018 and 2017.

Capital lease obligations relate to office space at the Company's headquarters. The lease began in 1993 and has a 60 year term. Lease payments are fixed at $\$ 0.8$ million per year through December 2022 and are negotiable thereafter.

As of December 31, 2018, the Company had an undrawn line of credit with the FRB of $\$ 538.5$ million. See Note 4 Loans and Leases and the Allowance for Loan and Lease Losses for loans pledged to the FRB as of December 31, 2018 and 2017.

As of December 31, 2018, the annual maturities of the Company's other debt, exclusive of capital lease obligations, were expected to be as follows:

| (dollars in thousands) Amount | 50,000 |
| :--- | ---: |
| 2019 | $\mathbf{7 5 , 0 0 0}$ |
| 2020 | - |
| 2021 | - |
| 2022 | - |
| 2023 | - |
| Thereafter | - |
| Total | $-125,000$ |

## Note 11. Shareholders' Equity

## Regulatory Capital

The table below sets forth the minimum required capital amounts and ratios for well capitalized institutions and the actual capital amounts and ratios for the Company and the Bank as of December 31, 2018 and 2017:


The Company and the Bank are subject to various regulatory capital requirements administered by the federal banking agencies. Failure to meet minimum capital requirements can result in certain mandatory, and possibly additional discretionary actions by regulators that, if undertaken, could have a direct material effect on the Company's financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Company and the Bank must meet specific capital guidelines that involve quantitative measures of assets, liabilities, and certain off-balance sheet items as calculated under regulatory accounting practices. The capital amounts and classifications are also subject to qualitative judgments by regulators about the components of regulatory capital, risk weightings, and other factors.

Quantitative measures established by regulation to ensure capital adequacy require the Company and the Bank to maintain minimum amounts and ratios of Common Equity Tier 1, Tier 1 and Total Capital. Both Common Equity Tier 1 Capital and Tier 1 Capital are common shareholders' equity, reduced by certain intangible assets, postretirement benefit liability adjustments, and unrealized gains and losses on investment securities. Total Capital is Tier 1 Capital plus an allowable amount of the reserve for credit losses. Risk-weighted assets are calculated by taking assets and credit equivalent amounts of off-balance-sheet items and assigning them to one of several broad risk categories. Four capital ratios are used to measure capital adequacy: Common Equity Tier 1 Capital divided by risk-weighted assets, as defined; Tier 1 Capital divided by risk-weighted assets; Total Capital divided by risk-weighted assets; and the Tier 1 Leverage ratio, which is Tier 1 Capital divided by quarterly adjusted average total assets.

In addition to the minimum risk-based capital requirements, all banks must hold additional capital, referred to as the capital conservation buffer (which is in the form of common equity) under the U.S. Basel III capital framework, to avoid being subject to limits on capital distributions and certain discretionary bonus payments to officers. When fully phased-in on January 1, 2019 the capital conservation buffer will be a minimum of $2.5 \%$ additional capital in addition to the minimum risk-based capital ratios. For 2018, the phase-in transition portion of that buffer was a minimum of $1.875 \%$.

As of December 31, 2018, the Company and the Bank were well capitalized as defined in the regulatory framework for prompt corrective action. The capital conservation buffer requirements do not currently result in any limitations on distributions or discretionary bonuses for the Company or the Bank. There were no conditions or events since December 31, 2018 that management believes have changed the Company or the Bank’s capital classifications.

## Dividends

Dividends paid by the Parent are substantially funded from dividends received from the Bank. The Bank is subject to federal and state regulatory restrictions that limit cash dividends and loans to the Parent. These restrictions generally require advanced approval from the Bank's regulator for payment of dividends in excess of the sum of net income for the current calendar year and the retained net income of the prior two calendar years.

## Common Stock Repurchase Program

The Parent has a common stock repurchase program in which shares repurchased are held in treasury stock for reissuance in connection with share-based compensation plans and for general corporate purposes. For the year ended December 31, 2018, the Parent repurchased 1,079,397 shares of common stock under its share repurchase program at an average cost per share of $\$ 81.80$ and total cost of $\$ 88.3$ million. From the beginning of the stock repurchase program in July 2001 through December 31, 2018, the Parent repurchased a total of 55.3 million shares of common stock at an average cost of $\$ 39.14$ per share and total cost over $\$ 2.1$ billion. From January 1, 2019 through February 15, 2019, the Parent repurchased an additional 298,500 shares of common stock at an average cost of $\$ 75.46$ per share for a total of $\$ 22.5$ million. The actual amount and timing of future share repurchases, if any, will depend on market conditions, applicable SEC rules and various other factors.

## Accumulated Other Comprehensive Income

The following table presents the components of other comprehensive income (loss), net of tax:

| (dollars in thousands) | Before Tax |  | Tax Effect |  | Net of Tax |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended December 31, 2018 |  |  |  |  |  |  |
| Net Unrealized Gains (Losses) on Investment Securities: |  |  |  |  |  |  |
| Net Unrealized Gains (Losses) Arising During the Period | \$ | $(11,051)$ | \$ | $(2,931)$ | \$ | $(8,120)$ |
| Amounts Reclassified from Accumulated Other Comprehensive Income (Loss) that (Increase) Decrease Net Income: |  |  |  |  |  |  |
| Amortization of Unrealized Holding (Gains) Losses on Held-to-Maturity Securities ${ }^{1}$ |  | 2,164 |  | 569 |  | 1,595 |
| Net Unrealized Gains (Losses) on Investment Securities |  | $(8,887)$ |  | $(2,362)$ |  | $(6,525)$ |
| Defined Benefit Plans: |  |  |  |  |  |  |
| Net Actuarial Gains (Losses) Arising During the Period |  | $(4,468)$ |  | $(1,184)$ |  | $(3,284)$ |
| Amortization of Net Actuarial Losses (Gains) |  | 1,835 |  | 460 |  | 1,375 |
| Amortization of Prior Service Credit |  | (567) |  | (150) |  | (417) |
| Defined Benefit Plans, Net |  | $(3,200)$ |  | (874) |  | $(2,326)$ |
| Other Comprehensive Income (Loss) | \$ | $(12,087)$ | \$ | $(3,236)$ | \$ | $(8,851)$ |
|  |  |  |  |  |  |  |
| Year Ended December 31, 2017 |  |  |  |  |  |  |
| Net Unrealized Gains (Losses) on Investment Securities: |  |  |  |  |  |  |
| Net Unrealized Gains (Losses) Arising During the Period | \$ | $(5,263)$ | \$ | $(2,078)$ | \$ | $(3,185)$ |
| Amounts Reclassified from Accumulated Other Comprehensive Income (Loss) that (Increase) Decrease Net Income: |  |  |  |  |  |  |
| Amortization of Unrealized Holding (Gains) Losses on Held-to-Maturity Securities ${ }^{1}$ |  | 1,982 |  | 783 |  | 1,199 |
| Net Unrealized Gains (Losses) on Investment Securities |  | $(3,281)$ |  | $(1,295)$ |  | $(1,986)$ |
| Defined Benefit Plans: |  |  |  |  |  |  |
| Net Actuarial Gains (Losses) Arising During the Period |  | 884 |  | 349 |  | 535 |
| Amortization of Net Actuarial Losses (Gains) |  | 1,382 |  | 545 |  | 837 |
| Amortization of Prior Service Credit |  | (322) |  | (127) |  | (195) |
| Defined Benefit Plans, Net |  | 1,944 |  | 767 |  | 1,177 |
| Other Comprehensive Income (Loss) | \$ | $(1,337)$ | \$ | (528) | \$ | (809) |
|  |  |  |  |  |  |  |
| Year Ended December 31, 2016 |  |  |  |  |  |  |
| Net Unrealized Gains (Losses) on Investment Securities: |  |  |  |  |  |  |
| Net Unrealized Gains (Losses) Arising During the Period | \$ | $(18,647)$ | \$ | $(7,358)$ | \$ | $(11,289)$ |
| Amounts Reclassified from Accumulated Other Comprehensive Income (Loss) that (Increase) Decrease Net Income: |  |  |  |  |  |  |
| Amortization of Unrealized Holding (Gains) Losses on Held-to-Maturity Securities ${ }^{1}$ |  | 1,605 |  | 634 |  | 971 |
| Net Unrealized Gains (Losses) on Investment Securities |  | $(17,042)$ |  | $(6,724)$ |  | $(10,318)$ |
| Defined Benefit Plans: |  |  |  |  |  |  |
| Net Actuarial Gains (Losses) Arising During the Period |  | (954) |  | (377) |  | (577) |
| Amortization of Net Actuarial Losses (Gains) |  | 1,224 |  | 483 |  | 741 |
| Amortization of Prior Service Credit |  | (322) |  | (127) |  | (195) |
| Defined Benefit Plans, Net |  | (52) |  | (21) |  | (31) |
| Other Comprehensive Income (Loss) | \$ | $(17,094)$ | \$ | $(6,745)$ | \$ | $(10,349)$ |

[^9]The following table presents the changes in each component of accumulated other comprehensive income (loss), net of tax:


The following table presents the amounts reclassified out of each component of accumulated other comprehensive income (loss):

| Details about Accumulated Other Comprehensive Income (Loss) |  |
| :--- | ---: | :--- |
| Components | Amount Reclassified from Accumulated Other |
| Comprehensive Income (Loss) ${ }^{\mathbf{1}}$ |  | | Statement Where Net Income the |
| ---: |
| Is Presented |



1 Amounts in parentheses indicate reductions to net income.
2 These accumulated other comprehensive income (loss) components are included in the computation of net periodic benefit cost and are included in Other Noninterest Expense on the consolidated statements of income (see Note 14 Pension Plans and Postretirement Benefit Plan for additional details).

## Note 12. Earnings Per Share

There were no adjustments to net income, the numerator, for purposes of computing basic earnings per share. The following is a reconciliation of the weighted average number of common shares outstanding for computing diluted earnings per share and antidilutive stock options and restricted stock outstanding for the years ended December 31, 2018, 2017, and 2016:

|  | Weighted Average Shares |  |
| :--- | ---: | ---: |
|  | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 7}$ |
| Denominator for Basic Earnings Per Share | $41,714,770$ | $42,280,931$ |
| Dilutive Effect of Equity Based Awards | 284,629 | 326,126 |
| Denominator for Diluted Earnings Per Share | $41,999,399$ | $42,644,100$ |

Antidilutive Stock Options and Restricted Stock Outstanding

## Note 13. Business Segments

The Company's business segments are defined as Retail Banking, Commercial Banking, Investment Services and Private Banking, and Treasury and Other. The Company's internal management accounting process measures the performance of these business segments. This process, which is not necessarily comparable with the process used by any other financial institution, uses various techniques to assign balance sheet and income statement amounts to the business segments, including allocations of income, expense, the provision for credit losses, and capital. This process is dynamic and requires certain allocations based on judgment and other subjective factors. Unlike financial accounting, there is no comprehensive authoritative guidance for management accounting that is equivalent to GAAP. Previously reported results have been reclassified to conform to the current reporting structure.

The net interest income of the business segments reflects the results of a funds transfer pricing process that matches assets and liabilities with similar interest rate sensitivity and maturity characteristics and reflects the allocation of net interest income related to the Company's overall asset and liability management activities on a proportionate basis. The basis for the allocation of net interest income is a function of the Company's assumptions that are subject to change based on changes in current interest rates and market conditions. Funds transfer pricing also serves to transfer interest rate risk to Treasury. However, the other business segments have some latitude to retain certain interest rate exposures related to customer pricing decisions within guidelines.

The provision for credit losses reflects the actual net charge-offs of the business segments. The amount of the consolidated provision for loan and lease losses is based on the methodology that we use to estimate our consolidated Allowance. The residual provision for credit losses to arrive at the consolidated provision for credit losses is included in Treasury and Other.

Noninterest income and expense includes allocations from support units to business units. These allocations are based on actual usage where practicably calculated or by management's estimate of such usage.

The provision for income taxes is allocated to business segments using a $26 \%$ effective income tax rate. However, the provision for income taxes for our Leasing business unit (included in the Commercial Banking segment) and Auto Leasing portfolio and Pacific Century Life Insurance business unit (both included in the Retail Banking segment) are assigned their actual effective income tax rates due to the unique relationship that income taxes have with their products. The residual income tax expense or benefit to arrive at the consolidated effective tax rate is included in Treasury and Other.

## Retail Banking

Retail Banking offers a broad range of financial products and services to consumers and small businesses. Loan and lease products include residential mortgage loans, home equity lines of credit, automobile loans and leases, personal lines of credit, installment loans, small business loans and leases, and credit cards. Deposit products include checking, savings, and time deposit accounts. Retail Banking also offers retail insurance products. Products and services from Retail Banking are delivered to customers through 69 branch locations and 382 ATMs throughout Hawaii and the Pacific Islands, e-Bankoh (on-line banking service), a 24 -hour customer service center, and a mobile banking service.

## Commercial Banking

Commercial Banking offers products including corporate banking, commercial real estate loans, commercial lease financing, auto dealer financing, and deposit products. Commercial lending and deposit products are offered to middle-market and large companies in Hawaii and the Pacific Islands. In addition, Commercial Banking offers deposit products to government entities in Hawaii. Commercial real estate mortgages focus on customers that include investors, developers, and builders predominantly domiciled in Hawaii. Commercial Banking also includes international banking and provides merchant services to its customers.

## Investment Services and Private Banking

Investment Services and Private Banking includes private banking and international client banking services, trust services, investment management, and institutional investment advisory services. A significant portion of this segment's income is derived from fees, which are generally based on the market values of assets under management. The private banking and personal trust groups assist individuals and families in building and preserving their wealth by providing investment, credit, and trust services to high-net-worth individuals. The investment management group manages portfolios utilizing a variety of investment products. Institutional client services offer investment advice to corporations, government entities, and foundations. This segment also provides a full service brokerage offering equities, mutual funds, life insurance, and annuity products

## Treasury and Other

Treasury consists of corporate asset and liability management activities, including interest rate risk management and a foreign currency exchange business. This segment's assets and liabilities (and related interest income and expense) consist of interest-bearing deposits, investment securities, federal funds sold and purchased, and short and long-term borrowings. The primary sources of noninterest income are from bank-owned life insurance, net gains from the sale of investment securities, and foreign exchange income related to customer-driven currency requests from merchants and island visitors. The net residual effect of the transfer pricing of assets and liabilities is included in Treasury, along with the elimination of intercompany transactions.

Other organizational units (Technology, Operations, Marketing, Human Resources, Finance, Credit and Risk Management, and Corporate and Regulatory Administration) provide a wide-range of support to the Company's other income earning segments. Expenses incurred by these support units are charged to the business segments through an internal cost allocation process.

Selected business segment financial information as of and for the years ended December 31, 2018, 2017, and 2016 were as follows:

| (dollars in thousands) | Retail Banking |  | Commercial Banking |  | Investment Services and Private Banking |  | Treasury and Other |  | Consolidated Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year Ended December 31, 2018 |  |  |  |  |  |  |  |  |  |  |
| Net Interest Income | \$ | 264,459 | \$ | 179,577 | \$ | 41,222 | \$ | 1,094 | \$ | 486,352 |
| Provision for Credit Losses |  | 14,898 |  | (760) |  | (61) |  | (652) |  | 13,425 |
| Net Interest Income After Provision for Credit Losses |  | 249,561 |  | 180,337 |  | 41,283 |  | 1,746 |  | 472,927 |
| Noninterest Income |  | 79,004 |  | 23,733 |  | 55,338 |  | 10,848 |  | 168,923 |
| Noninterest Expense |  | $(211,761)$ |  | $(81,344)$ |  | $(65,847)$ |  | $(12,672)$ |  | $(371,624)$ |
| Income Before Provision for Income Taxes |  | 116,804 |  | 122,726 |  | 30,774 |  | (78) |  | 270,226 |
| Provision for Income Taxes |  | $(29,172)$ |  | $(28,496)$ |  | $(8,113)$ |  | 15,157 |  | $(50,624)$ |
| Net Income | \$ | 87,632 | \$ | 94,230 | \$ | 22,661 | \$ | 15,079 | \$ | 219,602 |
| Total Assets as of December 31, 2018 | \$ | 6,365,263 | \$ | 3,958,523 | \$ | 349,832 | \$ | 6,470,356 | \$ | 17,143,974 |
|  |  |  |  |  |  |  |  |  |  |  |
| Year Ended December 31, 2017 |  |  |  |  |  |  |  |  |  |  |
| Net Interest Income | \$ | 264,041 | \$ | 171,038 | \$ | 29,693 | \$ | $(7,534)$ | \$ | 457,238 |
| Provision for Credit Losses |  | 14,008 |  | (160) |  | (21) |  | 3,073 |  | 16,900 |
| Net Interest Income After Provision for Credit Losses |  | 250,033 |  | 171,198 |  | 29,714 |  | $(10,607)$ |  | 440,338 |
| Noninterest Income |  | 85,042 |  | 21,670 |  | 57,105 |  | 21,600 |  | 185,417 |
| Noninterest Expense |  | $(209,807)$ |  | $(74,209)$ |  | $(61,674)$ |  | $(12,001)$ |  | $(357,691)$ |
| Income Before Provision for Income Taxes |  | 125,268 |  | 118,659 |  | 25,145 |  | $(1,008)$ |  | 268,064 |
| Provision for Income Taxes |  | $(44,545)$ |  | $(41,797)$ |  | $(9,303)$ |  | 12,253 |  | $(83,392)$ |
| Net Income | \$ | 80,723 | \$ | 76,862 | \$ | 15,842 | \$ | 11,245 | \$ | 184,672 |
| Total Assets as of December 31, 2017 | \$ | 5,936,568 | \$ | 3,742,991 | \$ | 336,455 | \$ | 7,073,038 | \$ | 17,089,052 |
|  |  |  |  |  |  |  |  |  |  |  |
| Year Ended December 31, 2016 |  |  |  |  |  |  |  |  |  |  |
| Net Interest Income | \$ | 242,967 | \$ | 156,080 | \$ | 24,714 | \$ | $(6,182)$ | \$ | 417,579 |
| Provision for Credit Losses |  | 10,700 |  | $(7,322)$ |  | (23) |  | 1,395 |  | 4,750 |
| Net Interest Income After Provision for Credit Losses |  | 232,267 |  | 163,402 |  | 24,737 |  | $(7,577)$ |  | 412,829 |
| Noninterest Income |  | 91,824 |  | 26,967 |  | 57,396 |  | 21,156 |  | 197,343 |
| Noninterest Expense |  | $(208,389)$ |  | $(70,405)$ |  | $(59,782)$ |  | $(12,002)$ |  | $(350,578)$ |
| Income Before Provision for Income Taxes |  | 115,702 |  | 119,964 |  | 22,351 |  | 1,577 |  | 259,594 |
| Provision for Income Taxes |  | $(41,067)$ |  | $(42,667)$ |  | $(8,270)$ |  | 13,871 |  | $(78,133)$ |
| Net Income | \$ | 74,635 | \$ | 77,297 | \$ | 14,081 | \$ | 15,448 | \$ | 181,461 |
| Total Assets as of December 31, 2016 | \$ | 5,342,078 | \$ | 3,565,912 | \$ | 280,410 | \$ | 7,303,967 | \$ | 16,492,367 |

## Note 14. Employee Benefits

The Company has defined contribution plans, defined benefit plans, and a postretirement benefit plan.

## Defined Contribution Plans

The Bank of Hawaii Retirement Savings Plan (the "Savings Plan") has three Company contribution components in addition to employee contributions: 1) $401(\mathrm{k})$ matching, as described below; 2) a $3 \%$ fixed amount based on eligible compensation; and 3) a discretionary value-sharing contribution.

Under the $401(\mathrm{k})$ matching component, participating employees may contribute up to $50 \%$ of their eligible compensation (within federal limits) to the Savings Plan. The Company makes matching contributions on behalf of participants equal to $\$ 1.25$ for each $\$ 1.00$ contributed by participants, up to $2 \%$ of the participants' eligible compensation, and $\$ 0.50$ for every $\$ 1.00$ contributed by participants over $2 \%$, up to $5 \%$ of the participants' eligible compensation. A $3 \%$ fixed contribution and a discretionary value-sharing contribution, that is linked to the Company's financial goals, are made regardless of whether the participating employee contributes to the Savings Plan and are invested in accordance with the participant's selection of investment options available under the Savings Plan. The Company also has a non-qualified savings plan which covers certain employees with compensation exceeding Internal Revenue Service ("IRS") limits on pay amounts in the allocation of the Savings Plan's benefits. Total expense for all components of the Company's defined contribution plans was $\$ 14.5$ million, $\$ 13.5$ million, and $\$ 12.8$ million for the years ended December 31, 2018, 2017, and 2016, respectively.

## Defined Benefit Plans

The Company has two defined benefit plans (the "Pension Plans"). In 1995, the Company froze its non-contributory, qualified defined benefit retirement plan (the "Retirement Plan") and the excess retirement plan (the "Excess Plan"), which covered employees of the Company and participating subsidiaries who met certain eligibility requirements. Beginning January 1, 2001, the Pension Plans no longer provided for compensation increases in the determination of benefits. The projected benefit obligation is equal to the accumulated benefit obligation due to the frozen status of the Pension Plans.

The assets of the Retirement Plan primarily consist of equity and fixed income mutual funds.
The Excess Plan is a non-qualified excess retirement benefit plan which covers certain employees of the Company and participating subsidiaries with compensation exceeding IRS limits on pay amounts applicable to the Pension Plan's benefit formula. The Excess Plan has no plan assets. The Excess Plan's projected benefit obligation and accumulated benefit obligation were $\$ 3.6$ million and $\$ 3.9$ million as of December 31, 2018 and 2017, respectively.

## Postretirement Benefit Plan

The Company's postretirement benefit plan provides retirees hired before January 1, 2012 with medical and dental insurance coverage. For eligible participants that retired before 2008 and met certain age requirements, the Company and retiree share in the cost of providing postretirement benefits where both the employer and retiree pay a portion of the insurance premiums. Eligible participants who retired before 2008 who did not meet certain age requirements continued on the Company's benefit plans, but pay for their full insurance premiums. Participants who retired on or after January 1, 2008, who had medical or dental coverage under the Company's plans immediately before retirement and meet certain age and years of service requirements as of December 31, 2008 are also eligible to participate in the Company's benefit plans, but must pay for their full insurance premiums. Retirees age 65 and older are provided with a Medicare supplemental plan subsidy. Most employees of the Company who have met certain eligibility requirements are covered by this plan. Participants who retired on or after January 1, 2008 who met certain age and/or years of service requirements are eligible for the Health Reimbursement Account ("HRA") program. The HRA program provides retirees with an initial credit based on years of service. Thereafter, an annual credit up to a maximum of $\$ 1,200$ is provided into the HRA. The retiree may use the HRA for medical, vision, prescription drug and dental premiums, co-payments, and medically necessary health care expenses that are not covered by any medical or dental insurance program or flexible health spending account. The plan was amended to provide access-only coverage for employees hired on or after January 1, 2012, and lowered eligibility for access from age 55 to age 50 . These retirees continue on the medical and dental plan until age 65 paying the full premium. As of December 31, 2018 and 2017, the Company had no segregated assets to provide for postretirement benefits.

The following table provides a reconciliation of changes in benefit obligation and fair value of plan assets, as well as the funded status recognized in the Company's consolidated statements of condition for the Pension Plans and postretirement benefit plan for the years ended December 31, 2018 and 2017.

| (dollars in thousands) | Pension Benefits |  |  |  | Postretirement Benefits |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  |  | 2017 | 2018 |  |  | 2017 |
| Benefit Obligation at Beginning of Year | \$ | 110,080 | \$ | 107,593 | \$ | 24,206 | \$ | 24,308 |
| Service Cost |  | - |  | - |  | 457 |  | 453 |
| Interest Cost |  | 4,193 |  | 4,665 |  | 936 |  | 1,093 |
| Plan Amendment ${ }^{3}$ |  | - |  | - |  | - |  | $(2,730)$ |
| Actuarial Losses (Gains) |  | $(5,031)$ |  | 6,828 |  | (869) |  | 2,052 |
| Employer Benefits Paid ${ }^{1}$ |  | $(6,580)$ |  | $(9,006)$ |  | $(1,278)$ |  | (970) |
| Benefit Obligation at End of Year | \$ | 102,662 | \$ | 110,080 | \$ | 23,452 | \$ | 24,206 |
| Fair Value of Plan Assets at Beginning of Year | \$ | 96,908 | \$ | 83,383 | \$ | - | \$ | - |
| Actual Return on Plan Assets |  | $(5,246)$ |  | 12,047 |  | - |  | - |
| Employer Contributions |  | 471 |  | 10,484 |  | 1,278 |  | 970 |
| Employer Benefits Paid ${ }^{1}$ |  | $(6,580)$ |  | $(9,006)$ |  | $(1,278)$ |  | (970) |
| Fair Value of Plan Assets at End of Year | \$ | 85,553 | \$ | 96,908 | \$ | - | \$ | - |
| Funded Status at End of Year ${ }^{2}$ | \$ | $(17,109)$ | \$ | $(13,172)$ | \$ | $(23,452)$ | \$ | $(24,206)$ |

 million and $\$ 0.5$ million for the years ended December 31, 2018 and 2017, respectively.
2 Amounts are recognized in Retirement Benefits Payable in the consolidated statements of condition.
3 For certain retirees, medical premiums were changed to a full retiree rate instead of a blended rate.
The changes in actuarial losses and (gains) related to the Company's Pension and postretirement benefit Plans are mainly due to changes in discount rates for the years ended December 31, 2018 and 2017. For the year ended December 31, 2018, the change in discount rate resulted in a $\$ 5.4$ million reduction to the Company's Pension Plans liability and a $\$ 1.6$ million reduction to the Company's postretirement benefit plan liability. For the year ended December 31, 2017, the change in discount rate resulted in a $\$ 6.0$ million increase to the Company's Pension Plans liability and a $\$ 1.8$ million increase to the Company's postretirement benefit plan liability.

The following presents the amounts recognized in the Company's accumulated other comprehensive income for the Pension Plans and postretirement benefit plan as of December 31, 2018 and 2017.

| (dollars in thousands) | Pension Benefits |  |  |  | Postretirement Benefits |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2018 |  |  | 2017 |
| Amounts Recognized in Accumulated Other Comprehensive Income (Loss), Net of Tax |  |  |  |  |  |  |  |  |
| Net Actuarial Gains (Losses) | \$ | $(42,127)$ | \$ | $(32,730)$ | \$ | 4,261 | \$ | 3,143 |
| Net Prior Service Credit |  | - |  | - |  | 1,856 |  | 1,872 |
| Total Amounts Recognized in Accumulated Other Comprehensive Income (Loss), Net of Tax | \$ | $(42,127)$ | \$ | $(32,730)$ | \$ | 6,117 | \$ | 5,015 |

Components of net periodic benefit cost for the Company's Pension Plans and the postretirement benefit plan are presented in the following table for the years ended December 31, 2018, 2017, and 2016.

| (dollars in thousands) | Pension Benefits |  |  |  |  |  | Postretirement Benefits |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  | 2018 |  | 2017 |  | 2016 |  |
| Service Cost | \$ | - | \$ | - | \$ | - | \$ | 457 | \$ | 453 | \$ | 513 |
| Interest Cost |  | 4,193 |  | 4,665 |  | 4,882 |  | 936 |  | 1,093 |  | 1,134 |
| Expected Return on Plan Assets |  | $(5,122)$ |  | $(5,011)$ |  | $(5,121)$ |  | - |  | - |  | - |
| Amortization of: |  |  |  |  |  |  |  |  |  |  |  |  |
| Prior Service Credit ${ }^{1}$ |  | - |  | - |  | - |  | (567) |  | (322) |  | (322) |
| Net Actuarial Losses (Gains) ${ }^{1}$ |  | 2,099 |  | 1,817 |  | 1,617 |  | (264) |  | (435) |  | (393) |
| Net Periodic Benefit Cost | \$ | 1,170 | \$ | 1,471 | \$ | 1,378 | \$ | 562 | \$ | 789 | \$ | 932 |

[^10]Assumptions used to determine the benefit obligations as of December 31, 2018 and 2017 for the Company's Pension Plans and postretirement benefit plan were as follows:

|  | Pension Benefits |  | Postretirement Benefits |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2018 | 2017 |
| Weighted Average Assumptions as of December 31: |  |  |  |  |
| Discount Rate | 4.41\% | 3.90\% | 4.48\% | 3.96\% |
| Health Care Cost Trend Rate Assumed For Next Year | - | - | 6.00\% | 6.30\% |

The health care cost trend rate is assumed to decrease annually, until reaching the ultimate trend rate of $4.5 \%$ in 2036.
Assumptions used to determine the net periodic benefit cost for the Company's Pension Plans and postretirement benefit plan for the years ended December 31, 2018, 2017, and 2016 were as follows:

|  | Pension Benefits |  |  | Postretirement Benefits |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2016 | 2018 | 2017 | 2016 |
| Weighted Average Assumptions as of December 31: |  |  |  |  |  |  |
| Discount Rate | 3.90\% | 4.45\% | 4.70\% | 3.96\% | 4.57\% | 4.74\% |
| Expected Long-Term Rate of Return on Plan Assets | 5.75\% | 5.75\% | 6.00\% | - | - | - |
| Health Care Cost Trend Rate | - | - | - | 6.30\% | 6.50\% | 6.70\% |

A combination of factors is used by management in determining the expected long-term rate of return on plan assets. Historical return experience for major asset categories are evaluated and current market factors, such as inflation and interest rates, are considered in determining the expected long-term rate of return assumption.

The Company expects to contribute $\$ 0.5$ million to the Pension Plans and $\$ 0.9$ million to the postretirement benefit plan for the year ending December 31, 2019.

As of December 31, 2018, expected benefits to be paid in each of the next five years and in the aggregate for the five years thereafter were as follows:

| (dollars in thousands) | Pension Benefits | Postretirement Benefits |
| :--- | :---: | :---: |
| 2019 | $\$ 6,918$ | 886 |
| 2020 | 7,020 | 943 |
| 2021 | 7,163 | 7,189 |
| 2022 | 7,020 |  |
| 2023 | 1,137 |  |
| Years 2024-2028 | 7,195 |  |

## Retirement Plan Assets

The Company's overall investment strategy is to maintain the purchasing power of the current assets and all future contributions by producing positive rates of return on plan assets; achieve capital growth towards the attainment of full funding of the Retirement Plan's termination liability; maximize returns within reasonable and prudent levels of risk; and control costs of administering the plan and managing the investments. The long-term investment objective is to achieve an overall annualized total return, gross of fees, above the blended benchmark index comprised of 36\% MSCI USA IMI Index, $24 \%$ MSCI ACWI exUS Index, and 40\% Barclays Capital Aggregate Bond Index.

Subject to liquidity requirements, the asset allocation targets are $60 \%$ for equity securities, $40 \%$ for fixed income securities with a $10 \%$ to $20 \%$ range permitted from the strategic targets, and zero to $20 \%$ for cash. Within the equity securities portfolio, the range for domestic securities is from $50 \%$ to $100 \%$ and the range for international securities is from $0 \%$ to $50 \%$. All assets selected for the Retirement Plan must have a readily ascertainable market value and must be readily marketable.

Due to market fluctuations or cash flows, the allocation for each asset class may be breached by as much as $5 \%$ on a temporary basis. However, asset allocations are expected to conform to target ranges within 90 days of such an occurrence.

The fair values of the Retirement Plan assets as of December 31, 2018 and 2017 by asset category were as follows:

|  |  |  | Fair Value Measurements |
| :--- | ---: | ---: | ---: | ---: |

Quoted prices for these investments were available in active markets, and therefore were classified as Level 1 measurements in the fair value hierarchy.

## Note 15. Share-Based Compensation

The Company has share-based compensation plans which allow grants of stock options, restricted stock, stock appreciation rights, and restricted stock units to its employees and non-employee directors. The Company's employee stock option plans are shareholder approved and administered by the Human Resources and Compensation Committee of the Board of Directors. Stock options provide grantees the option to purchase shares of the Parent's common stock at a specified exercise price and, generally, expire 10 years from the date of grant. Stock option grants include incentive and non-qualified stock options whose vesting may be subject to one or more criteria, including employment or achievement of Company performance measures. Stock option exercise prices were equal to the quoted market price of the Parent's common stock on the date of grant. Restricted stock provides grantees with rights to shares of common stock upon completion of one or more criteria, including service period, performance or other conditions as established by the Compensation Committee, such as vesting tied to the Company's financial performances relative to the peer group or achievement of an absolute financial performance target. During the restriction period, all shares are considered outstanding and dividends are paid on the restricted stock. Generally, restricted stock vests over periods ranging from one to four years from the date of grant. Restricted stock and dividends may be forfeited if an employee terminates prior to vesting.

As of December 31, 2018, total shares authorized under the plans were 2.1 million shares, of which 1.8 million shares were available for future grants.
The Company recognizes compensation expense, measured as the fair value of the share-based award on the date of grant, on a straight-line basis over the requisite service period. Share-based compensation is recorded in the statements of income as a component of salaries and benefits for employees and as a component of other noninterest expense for non-employee directors, with a corresponding increase to capital surplus in shareholders' equity. For the years ended December 31, 2018, 2017, and 2016, compensation expense and the related income tax benefit recognized for stock options and restricted stock were as follows:

| (dollars in thousands) | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Compensation Expense | \$ | 8,146 | \$ | 7,369 | \$ | 6,787 |
| Income Tax Benefit |  | 2,160 |  | 2,910 |  | 2,680 |

## Restricted Stock

As of December 31, 2018, unrecognized compensation expense related to unvested restricted stock was $\$ 10.6$ million. The unrecognized compensation expense is expected to be recognized over a weighted average period of 1.84 years.

The following table presents the activity for restricted stock:
Grant Date Fair Value of Restricted Stock that
Vested During the Year (in thousands)

|  | Number of Shares | Grant Date Fair Value |
| :--- | :---: | :---: | :---: |
| (in thousands) |  |  |
| Granted | 268,813 | $\$ 192$ |
| Vested | 121,495 | 64.40 |
| Forfeited | $(105,891)$ | 53.46 |
| Unvested as of December 31, 2016 | $(13,894)$ | 58.14 |
| Granted | 270,523 | 5,661 |
| Vested | 124,460 | 60.58 |
| Forfeited | $(52,822)$ | 84.53 |
| Unvested as of December 31, 2017 | $(22,058)$ | 60.06 |
| Granted | 320,103 | 69.46 |
| Vested | 120,173 | 69.36 |
| Forfeited | $(110,231)$ | 83.87 |
| Unvested as of December 31, 2018 ${ }^{\mathbf{1}}$ | $(15,558)$ | 59.41 |

${ }^{1}$ As of December 31, 2018, 38,560 shares were unvested from service-based grants.

## Restricted Stock Units

There were no RSUs granted during 2018 and 2017. During 2016, the Company granted RSUs payable solely in cash. The RSUs vest over periods ranging from three to four years from the date of grant and are subject to forfeiture until performance and employment targets are achieved. Upon vesting, the RSUs are converted to cash based on the closing stock price on the vesting date. Total recognized compensation expense related to the RSUs was $\$ 0.6$ million, $\$ 3.4$ million, and $\$ 5.9$ million for the years ended December 31, 2018, 2017, and 2016, respectively.

The following table presents the activity for RSU:
Fair Value of Restricted Stock Unit that Vested During

|  | Number of Units | Weighted Average <br> Grant Date Fair Value | the Year <br> (in thousands) |
| :--- | ---: | ---: | ---: |
| Balance as of December 31, 2015 | 135,505 | $\$$ | 55.86 |

## Stock Options

There were no stock options granted for the years ended December 31, 2018, 2017, and 2016. All stock options granted were fully vested prior to December 31, 2016. The Company reissues treasury stock to satisfy stock option exercises.

The following table presents the activity related to stock options under all plans for the year ended December 31, 2018:
$\left.\begin{array}{llll} & & \begin{array}{r}\text { Weighted } \\ \text { Average } \\ \text { Exercise } \\ \text { Price }\end{array} & \begin{array}{r}\text { Weighted } \\ \text { Average } \\ \text { Semaining } \\ \text { Contrack } \\ \text { Term (in years) }\end{array} \\ \begin{array}{c}\text { Options }\end{array} & \begin{array}{c}\text { Aggregate } \\ \text { Intrinsic } \\ \text { Value }\end{array} \\ \text { (in thousands) }\end{array}\right]$

The following summarizes certain stock option activity of the Company for the years ended December 31, 2018, 2017, and 2016:

| (dollars in thousands) | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 7}$ | $\mathbf{2 0 1 6}$ |
| :--- | ---: | ---: | ---: | ---: |
| Intrinsic Value of Stock Options Exercised | 1,634 | $\$, 991$ | $\$ 1,990$ |
| Cash Received from Stock Options Exercised | 1,791 | $\$, 502$ | 2,546 |
| Tax Benefits Realized from Stock Options Exercised | 240 | 2,003 | 384 |

## Note 16. Income Taxes

Provision for Income Taxes
The components of the Company's provision for income taxes for the years ended December 31, 2018, 2017, and 2016 were as follows:

| (dollars in thousands) | 2018 |  | 2017 |  |  | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Current: |  |  |  |  |  |  |
| Federal | \$ | 45,464 | \$ | 73,176 | \$ | 69,061 |
| State |  | 11,434 |  | 6,039 |  | 1,885 |
| Total Current |  | 56,898 |  | 79,215 |  | 70,946 |
| Deferred: |  |  |  |  |  |  |
| Federal |  | $(2,172)$ |  | 5,042 |  | 6,947 |
| State |  | $(4,102)$ |  | (865) |  | 240 |
| Total Deferred |  | $(6,274)$ |  | 4,177 |  | 7,187 |
| Provision for Income Taxes | \$ | 50,624 | \$ | 83,392 | \$ | 78,133 |

The tax effects of fair value adjustments on available-for-sale investment securities, the amortization of unrealized gains and losses related to investment securities transferred to held-to-maturity, and the minimum pension liability adjustment are recorded directly to consolidated shareholders' equity. The Company elected to adopt ASU No. 2016-09 "Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting" in the first quarter of 2017, which requires the Company to record excess tax benefits related to stock options as a reduction of the provision for income taxes, whereas they were previously recognized in equity. The net tax benefit recorded directly to consolidated shareholders' equity was $\$ 3.2$ million, $\$ 0.5$ million, and $\$ 7.9$ million for the years ended December 31, 2018, 2017, and 2016, respectively.

Deferred Tax Liabilities and Assets
As of December 31, 2018 and 2017, significant components of the Company's deferred tax liabilities and assets were as follows:

| (dollars in thousands) | December 31, |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  |  | 2017 |
| Deferred Tax Liabilities: |  |  |  |  |
| Accelerated Depreciation | \$ | $(2,864)$ | \$ | - |
| Accrued Pension Cost |  | $(11,270)$ |  | $(11,245)$ |
| Federal Home Loan Bank Stock |  | $(3,416)$ |  | $(3,408)$ |
| Lease Transactions |  | $(53,230)$ |  | $(57,458)$ |
| Energy Tax Credits |  | $(5,274)$ |  | $(8,821)$ |
| Investment in Variable Interest Entities |  | $(3,769)$ |  | $(3,407)$ |
| Deferred Loan Fees |  | $(6,688)$ |  | $(6,903)$ |
| Originated Mortgage Servicing Rights |  | $(6,548)$ |  | $(6,646)$ |
| Other |  | $(1,420)$ |  | $(1,883)$ |
| Gross Deferred Tax Liabilities |  | $(94,479)$ |  | $(99,771)$ |
| Deferred Tax Assets: |  |  |  |  |
| Accelerated Depreciation |  | - |  | 1,844 |
| Allowance for Loan Losses |  | 30,045 |  | 30,148 |
| Minimum Pension Liability |  | 12,989 |  | 12,114 |
| Accrued Expenses |  | 14,805 |  | 9,937 |
| Postretirement Benefit Obligations |  | 8,396 |  | 8,595 |
| Capital Lease Expenses |  | 2,172 |  | 2,168 |
| Restricted Stock |  | 5,178 |  | 6,223 |
| Net Unrealized Losses on Investments Securities |  | 5,421 |  | 3,059 |
| Deductible State and Local Taxes |  | 3,242 |  | 2,461 |
| Other |  | 4,244 |  | 5,183 |
| Gross Deferred Tax Assets Before Valuation Allowance |  | 86,492 |  | 81,732 |
| Valuation Allowance |  | $(1,102)$ |  | (955) |
| Gross Deferred Tax Assets After Valuation Allowance |  | 85,390 |  | 80,777 |
| Net Deferred Tax Liabilities | \$ | $(9,089)$ | \$ | $(18,994)$ |

Accounting Standards Codification (ASC) 740, Income Taxes, requires the effects of changes in tax rates and laws on deferred tax balances to be recognized in the period in which the legislation is enacted. Since the Tax Cuts and Jobs Act was enacted on December, 22 2017, the Company revalued and adjusted its deferred taxes by recording an additional $\$ 3.6$ million tax expense in December 2017. The Company's deferred tax balances as of December 31, 2017 and December 31, 2018 are based on the $21 \%$ federal tax rate which is expected to be in effect during the periods in which the temporary differences reverse.

Both positive and negative evidence was considered by management in determining the need for a valuation allowance. Negative evidence included the uncertainty regarding the generation of capital gains in future years and restrictions on the ability to sell low-income housing investments during periods when carrybacks of capital losses are allowed. Positive evidence included capital gains in the carryback years. After considering all available evidence, management determined that a valuation allowance to offset deferred tax assets related to low-income housing investments that can only be used to offset capital gains was appropriate. Management determined that a valuation allowance was not required for the remaining deferred tax assets because it is more likely than not these assets will be realized through future reversals of existing taxable temporary difference and future taxable income exclusive of reversing temporary differences. The Tax Act prohibits the carryback of net operating losses (NOLs) generated in tax year ending after December 31, 2017. This eliminated consideration of taxable income in prior carryback years as an income source for prospective NOLs.

Certain events covered by Internal Revenue Code Section 593(e) will trigger a recapture of base year reserves of acquired thrift institutions. The base year reserves of acquired thrift institutions would be recaptured if an entity ceases to qualify as a bank for federal income tax purposes. The base year reserves of thrift institutions also remain subject to income tax penalty provisions that, in general, require recapture upon certain stock redemptions of, and excess distributions to, shareholders. As of December 31, 2018, retained earnings included $\$ 18.2$ million of base year reserves for which the deferred federal income tax liability of $\$ 4.8$ million has not been recognized.

Effective Tax Rate
The following is a reconciliation of the statutory federal income tax rate to the Company's effective tax rate for the years ended December 31, 2018, 2017, and 2016:

|  | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| Statutory Federal Income Tax Rate | 21.00 \% | 35.00 \% | 35.00 \% |
| Increase (Decrease) in Income Tax Rate Resulting From: |  |  |  |
| State Taxes, Net of Federal Income Tax | 2.29 | 1.50 | 0.60 |
| Tax Reserve Adjustments | 0.21 | 0.09 | (0.18) |
| Low-Income Housing Investments | 0.22 | (1.18) | (0.69) |
| Investment Tax Credits | (1.04) | (1.03) | (0.85) |
| Bank-Owned Life Insurance | (0.55) | (0.85) | (0.88) |
| Tax-Exempt Income | (1.29) | (2.57) | (2.71) |
| Excess Tax Benefits - Stock Compensation | (0.34) | (0.83) | - |
| Leveraged Lease | (0.83) | (0.03) | (0.13) |
| Tax Reform Effects | (0.75) | 1.25 | - |
| Other | (0.19) | (0.24) | (0.06) |
| Effective Tax Rate | 18.73 \% | 31.11 \% | 30.10 \% |

The Tax Cuts and Jobs Act changed the corporate tax rate from 35\% to 21\%, effective January 1, 2018. The impact on deferred tax assets and liabilities was recognized as an additional income tax expense of $\$ 3.6$ million in the fourth quarter of 2017, when the act was signed into law.

## Unrecognized Tax Benefits

The Company is required to record a liability, referred to as an unrecognized tax benefit ("UTB"), for the entire amount of benefit taken in a prior or future income tax return when the Company determines that a tax position has a less than $50 \%$ likelihood of being accepted by the taxing authority. The following presents a reconciliation of the Company's liability for UTBs for the years ended December 31, 2018, 2017, and 2016:

| (dollars in thousands) | 2018 |  |  | 2017 |  | 2016 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Unrecognized Tax Benefits at Beginning of Year | \$ | 5,292 | \$ | 6,574 | \$ | 11,602 |
| Gross Increases, Related to Tax Positions Taken in a Prior Period |  | 157 |  | 273 |  | 145 |
| Gross Decreases, Related to Tax Positions Taken in a Prior Period |  | - |  | - |  | (230) |
| Gross Increases, Related to Current Period Tax Positions |  | 885 |  | 1,124 |  | 395 |
| Settlement with Taxing Authority |  | - |  | - |  | $(1,002)$ |
| Lapse of Statute of Limitations |  | (793) |  | $(2,679)$ |  | $(4,336)$ |
| Unrecognized Tax Benefits at End of Year | \$ | 5,541 | \$ | 5,292 | \$ | 6,574 |

As of December 31, 2018 and 2017, $\$ 5.5$ million and $\$ 5.3$ million, respectively, in liabilities for UTBs was related to UTBs that if reversed would have an impact on the Company's effective tax rate.

Management believes that it is reasonably possible that the Company's liability for UTBs could further decrease as a result of the expiration of statutes of limitations within the next 12 months. However, management is currently not able to estimate a range of possible change in the amount of the liability for UTBs recorded as of December 31, 2018.

The Company classifies interest and penalties, if any, related to the liability for UTBs as a component of the provision for income taxes. For the years ended December 31, 2018, 2017, and 2016, the Company recorded a net tax benefit of less than $\$ 0.1$ million, $\$ 0.1$ million, and $\$ 1.1$ million, respectively, for interest and penalties. As of December 31, 2018 and 2017, the Company had accrued $\$ 0.9$ million, respectively, for the payment of possible interest and penalties.

The federal tax returns for 2015 through 2017 remain subject to examination. The company is currently under audit for tax year 2016. The Company's State of Hawaii income tax returns for 2015 through 2017 remain subject to examination by the taxing authorities.

## Note 17. Derivative Financial Instruments

The notional amount and fair value of the Company's derivative financial instruments as of December 31, 2018 and 2017 were as follows:

|  | December 31, 2018 |  |  |  | December 31, 2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (dollars in thousands) | Notional Amount |  |  | Fair Value | Notional Amount |  | Fair Value |  |
| Interest Rate Lock Commitments | \$ | 33,133 | \$ | 871 | \$ | 35,422 | \$ | 789 |
| Forward Commitments |  | 34,102 |  | (352) |  | 45,143 |  | (56) |
| Interest Rate Swap Agreements |  |  |  |  |  |  |  |  |
| Receive Fixed/Pay Variable Swaps |  | 505,034 |  | $(2,537)$ |  | 374,670 |  | $(1,331)$ |
| Pay Fixed/Receive Variable Swaps |  | 505,034 |  | 6,082 |  | 374,670 |  | 1,436 |
| Foreign Exchange Contracts |  | 55,663 |  | 793 |  | 54,332 |  | (13) |
| Conversion Rate Swap Agreement |  | 80,746 |  | - |  | 70,571 |  | - |

The following table presents the Company's derivative financial instruments, their fair values, and their location in the consolidated statements of condition as of December 31, 2018 and 2017:

|  | December 31, 2018 |  |  |  | December 31, 2017 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Derivative Financial Instruments Not Designated as Hedging Instruments ${ }^{1}$ (dollars in thousands) | Asset <br> Derivatives |  | Liability Derivatives |  | Asset <br> Derivatives |  | Liability Derivatives |  |
| Interest Rate Lock Commitments | \$ | 877 | \$ | 6 | \$ | 789 | \$ | - |
| Forward Commitments |  | 4 |  | 356 |  | 14 |  | 70 |
| Interest Rate Swap Agreements |  | 12,915 |  | 9,370 |  | 9,583 |  | 9,478 |
| Foreign Exchange Contracts |  | 808 |  | 15 |  | 132 |  | 145 |
| Total | \$ | 14,604 | \$ | 9,747 | \$ | 10,518 | \$ | 9,693 |

${ }^{1}$ Asset derivatives are included in other assets and liability derivatives are included in other liabilities in the consolidated statements of condition.
The following table presents the Company's derivative financial instruments and the amount and location of the net gains or losses recognized in the consolidated statements of income for the years ended December 31, 2018, 2017, and 2016:

| Derivative Financial Instruments Not Designated as Hedging Instruments (dollars in thousands) | Location of Net Gains (Losses)Recognized in the Statements of Income | Year Ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2018 |  | 2017 |  | 2016 |
| Interest Rate Lock Commitments | Mortgage Banking | \$ | 3,534 | \$ | 5,643 | \$ | 7,834 |
| Forward Commitments | Mortgage Banking |  | 821 |  | $(1,275)$ |  | 1,741 |
| Interest Rate Swap Agreements | Other Noninterest Income |  | 1,835 |  | 698 |  | 2,987 |
| Foreign Exchange Contracts | Other Noninterest Income |  | 3,163 |  | 3,296 |  | 2,962 |
| Conversion Rate Swap Agreement | Investment Securities Gains (Losses), Net |  | $(1,000)$ |  | - |  | - |
| Total |  | \$ | 8,353 | \$ | 8,362 | \$ | 15,524 |

Management has received authorization from the Bank's Board of Directors to use derivative financial instruments as an end-user in connection with the Bank's risk management activities and to accommodate the needs of the Bank's customers. As with any financial instrument, derivative financial instruments have inherent risks. Market risk is defined as the risk of adverse financial impact due to fluctuations in interest rates, foreign exchange rates, and equity prices. Market risks associated with derivative financial instruments are balanced with the expected returns to enhance earnings performance and shareholder value, while limiting the volatility of each. The Company uses various processes to monitor its overall market risk exposure, including sensitivity analysis, value-at-risk calculations, and other methodologies.

Derivative financial instruments are also subject to credit and counterparty risk, which is defined as the risk of financial loss if a borrower or counterparty is either unable or unwilling to repay borrowings or settle transactions in accordance with the underlying contractual terms. Credit and counterparty risks associated with derivative financial instruments are similar to those relating to traditional financial instruments. The Company manages derivative credit and counterparty risk by evaluating the creditworthiness of each borrower or counterparty, adhering to the same credit approval process used for commercial lending activities.

As of December 31, 2018 and 2017, the Company did not designate any derivative financial instruments as formal hedging relationships. The Company's free-standing derivative financial instruments are required to be carried at their fair value on the Company's consolidated statements of condition. These financial instruments have been limited to interest rate lock commitments ("IRLCs"), forward commitments, interest rate swap agreements, foreign exchange contracts, and conversion rate swap agreements.

The Company enters into IRLCs for residential mortgage loans which commit us to lend funds to a potential borrower at a specific interest rate and within a specified period of time. IRLCs that relate to the origination of mortgage loans that will be held for sale are considered derivative financial instruments under applicable accounting guidance. Outstanding IRLCs expose the Company to the risk that the price of the mortgage loans underlying the commitments may decline due to increases in mortgage interest rates from inception of the rate lock to the funding of the loan. To mitigate this risk, the Company utilizes forward commitments as economic hedges against the potential decreases in the values of the loans held for sale. IRLCs and forward commitments are freestanding derivatives which are carried at fair value with changes recorded in the mortgage banking component of noninterest income in the Company's consolidated statements of income.

The Company enters into interest rate swap agreements to facilitate the risk management strategies of a small number of commercial banking customers. The Company mitigates the interest rate risk of entering into these agreements by entering into equal and offsetting interest rate swap agreements with highly rated third party financial institutions. The interest rate swap agreements are free-standing derivatives and are recorded at fair value in the Company's consolidated statements of condition. Fair value changes are recorded in other noninterest income in the Company's consolidated statements of income. The Company is party to master netting arrangements with its financial institution counterparties; however, the Company does not offset assets and liabilities under these arrangements for financial statement presentation purposes. Collateral, usually in the form of cash or marketable securities, is posted by the counterparty with net liability positions in accordance with contract thresholds. See Note 19 Balance Sheet Offsetting for more information.

The Company's interest rate swap agreements with financial institution counterparties may contain credit-risk-related contingent features tied to a specified credit rating of the Company. Under these provisions, should the Company's specified rating fall below a particular level (e.g., investment grade), or if the Company no longer obtains the specified rating, the counterparty may require the Company to pledge collateral on an immediate and ongoing basis (subject to the requirement that such swaps are in a net liability position beyond the level specified in the contract), or require immediate settlement of the swap agreement. Other credit-risk-related contingent features may also allow the counterparty to require immediate settlement of the swap agreement if the Company fails to maintain a specified minimum level of capitalization.

With regard to derivative contracts not centrally cleared through a clearinghouse, regulations require collateral to be posted by the party with a net liability position (i.e., the threshold for posting collateral was reduced to zero, subject to certain minimum transfer amounts). The requirements generally applied to new derivative contracts entered into by the Company after March 1, 2017, although certain counterparties may elect to apply lower thresholds to existing contracts.

Parties to a centrally cleared over-the-counter derivative exchange daily payments that reflect the daily change in value of the derivative. These payments are commonly referred to as variation margin. Historically, variation margin payments have typically been treated as collateral against the derivative position. Effective 2017, the Chicago Mercantile Exchange and LCH.Clearnet Limited (collectively, the "clearinghouses") amended their rulebooks to legally characterize variation margin payments for over-the-counter derivatives they clear as settlements of the derivatives' mark-to-market exposure rather than collateral against the exposures. This rule change effectively results in any derivative cleared through the clearinghouses to have a fair value that approximates zero on a daily basis. During the second quarter of 2017, the Company executed its first swap agreements cleared through the clearinghouses. As of December 31, 2018, the application of the rule change reduced the swap agreement liability by $\$ 3.9$ million, as reflected in the table above. Going forward, the Company expects most of the swap agreements executed with third party financial institutions will be required to be cleared through the clearinghouses. The uncleared swap agreements executed with third party financial institutions will remain subject to the collateral requirements and credit-risk-related contingent features described in the previous paragraphs, and therefore, are not subject to the variation margin rule change. Likewise, the swap agreements executed with the Company's commercial banking customers will remain uncleared and will also not be subject to the variation margin rule change.

The Company utilizes foreign exchange contracts to offset risks related to transactions executed on behalf of customers. The foreign exchange contracts are free-standing derivatives which are carried at fair value with changes included in other noninterest income in the Company's consolidated statements of income.

As each sale of Visa Class B restricted shares was completed, the Company entered into a conversion rate swap agreement with the buyer that requires payment to the buyer in the event Visa further reduces the conversion ratio of Class B into Class A unrestricted common shares. In the event of Visa increasing the conversion ratio, the buyer would be required to make payment to the Company. In June 2018, Visa announced a reduction of the conversion ratio from 1.6483 to 1.6298 effective June 28, 2018. As a result, the Company recorded a $\$ 1.0$ million liability in June 2018 which represents the amount paid to the buyers of the Visa Class B shares in July 2018. As of December 31, 2018, the conversion rate swap agreement was valued at zero (i.e., no contingent liability recorded) as further reductions to the conversion ratio were deemed neither probable nor reasonably estimable by management. See Note 3 Investment Securities for more information.

## Note 18. Affordable Housing Projects Tax Credit Partnerships

The Company makes equity investments in various limited partnerships that sponsor affordable housing projects utilizing the Low Income Housing Tax Credit (LIHTC) pursuant to Section 42 of the Internal Revenue Code. The purpose of these investments is to achieve a satisfactory return on capital, to facilitate the sale of affordable housing product offerings, and to assist in achieving goals associated with the Community Reinvestment Act. The primary activities of the limited partnerships include the identification, development, and operation of multi-family housing that is leased to qualifying residential tenants. Generally, these types of investments are funded through a combination of debt and equity.

The Company is a limited partner in each LIHTC limited partnership. Each limited partnership is managed by an unrelated third party general partner who exercises full control over the affairs of the limited partnership. The general partner has all the rights, powers and authority granted or permitted to be granted to a general partner of a limited partnership. Duties entrusted to the general partner of each limited partnership include, but are not limited to: investment in operating companies, company expenditures, investment of excess funds, borrowing funds, employment of agents, disposition of fund property, prepayment and refinancing of liabilities, votes and consents, contract authority, disbursement of funds, accounting methods, tax elections, bank accounts, insurance, litigation, cash reserve, and use of working capital reserve funds. Except for limited rights granted to the limited partner(s) relating to the approval of certain transactions, the limited partner(s) may not participate in the operation, management, or control of the limited partnership's business, transact any business in the limited partnership's name or have any power to sign documents for or otherwise bind the limited partnership. In addition, the general partner may only be removed by the limited partner(s) in the event the general partner fails to comply with the terms of the agreement or is negligent in performing its duties.

The general partner of each limited partnership has both the power to direct the activities which most significantly affect the performance of each partnership and the obligation to absorb losses or the right to receive benefits that could be significant to the entities. Therefore, the Company has determined that it is not the primary beneficiary of any LIHTC partnership. The Company uses the effective yield method to account for its pre-2015 investments in these entities.
Beginning January 1, 2015, any new investments that meet the requirements of the proportional amortization method are recognized using the proportional amortization method. The Company's net affordable housing tax credit investments and related unfunded commitments were $\$ 73.7$ million and $\$ 71.7$ million as of December 31, 2018 and 2017, respectively, and are included in other assets in the consolidated statements of condition.

## Unfunded Commitments

As of December 31, 2018, the expected payments for unfunded affordable housing commitments were as follows:

|  |  | Amount |
| :--- | ---: | ---: |
| (dollars in thousands) | 5,506 |  |
| 2019 | 8,350 |  |
| 2020 | 61 |  |
| 2021 | 121 |  |
| 2022 | 42 |  |
| 2023 | 1,118 |  |
| Thereafter | $\mathbf{1 5 , 1 9 8}$ |  |
| Total Unfunded Commitments | $\$$ |  |

The following table presents tax credits and other tax benefits recognized and amortization expense related to affordable housing for the years ended December 31, 2018, 2017, and 2016.

| (dollars in thousands) | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Effective Yield Method |  |  |  |  |  |  |
| Tax credits and other tax benefits recognized | \$ | 13,572 | , | 13,569 | \$ | 13,996 |
| Amortization Expense in Provision for Income Taxes |  | 8,311 |  | 8,373 |  | 7,886 |
| Proportional Amortization Method |  |  |  |  |  |  |
| Tax credits and other tax benefits recognized | \$ | 1,641 | \$ | 1,040 | \$ | - |
| Amortization Expense in Provision for Income Taxes |  | 1,332 |  | 800 |  | - |

There were no impairment losses related to LIHTC investments for the years ended December 31, 2018, 2017, and 2016. During the first quarter of 2018, the Company recorded a $\$ 2.0$ million adjustment to increase its LIHTC investments. This adjustment resulted in a decrease to provision for income tax.

## Note 19. Balance Sheet Offsetting

## Interest Rate Swap Agreements ("Swap Agreements")

The Company enters into swap agreements to facilitate the risk management strategies of a small number of commercial banking customers. The Company mitigates the risk of entering into these agreements by entering into equal and offsetting swap agreements with highly-rated third party financial institutions. The swap agreements are free-standing derivatives and are recorded at fair value in the Company's consolidated statements of condition (asset positions are included in other assets and liability positions are included in other liabilities). The Company is party to master netting arrangements with its financial institution counterparties; however, the Company does not offset assets and liabilities under these arrangements for financial statement presentation purposes. The master netting arrangements provide for a single net settlement of all swap agreements, as well as collateral, in the event of default on, or termination of, any one contract. Collateral, usually in the form of marketable securities, is posted by the party (i.e., the Company or the financial institution counterparty) with net liability positions in accordance with contract thresholds. The Company had a net liability positions with its financial institution counterparties totaling \$0.3 million and \$3.2 million as of December 31, 2018 and 2017, respectively. See Note 17 Derivative Financial Instruments for more information.

Parties to a centrally cleared over-the-counter derivative exchange daily payments that reflect the daily change in value of the derivative. Effective 2017, these payments, commonly referred to as variation margin, will be recorded as settlements of the derivatives' mark-to-market exposure rather than collateral against the exposures. This rule change effectively results in any centrally cleared derivative having a fair value that approximates zero on a daily basis, and therefore, these swap agreements were not included in the offsetting table at the end of this section. See Note 17 Derivative Financial Instruments for more information.

## Securities Sold Under Agreements to Repurchase ("Repurchase Agreements")

The Company enters into agreements under which it sells securities subject to an obligation to repurchase the same or similar securities. Under these arrangements, the Company may transfer legal control over the assets but still retain effective control through an agreement that both entitles and obligates the Company to repurchase the assets. As a result, these repurchase agreements are accounted for as collateralized financing arrangements (i.e., secured borrowings) and not as sales and subsequent repurchases of securities. The obligation to repurchase the securities is reflected as a liability in the Company's consolidated statements of condition, while the securities underlying the repurchase agreements remain in the respective investment securities asset accounts. As a result, there is no offsetting or netting of the investment securities assets with the repurchase agreement liabilities. In addition, as the Company does not enter into reverse repurchase agreements, there is no such offsetting to be done with the repurchase agreements.

The right of setoff for a repurchase agreement resembles a secured borrowing, whereby the collateral pledged by the Company would be used to settle the fair value of the repurchase agreement should the Company be in default (e.g., fail to make an interest payment to the counterparty). For private institution repurchase agreements, if the private institution counterparty were to default (e.g., declare bankruptcy), the Company could cancel the repurchase agreement (i.e., cease payment of principal and interest) and attempt collection on the amount of collateral value in excess of the repurchase agreement fair value. The collateral is held by a third party financial institution in the counterparty's custodial account. The counterparty has the right to sell or repledge the investment securities. For government entity repurchase agreements, the collateral is held by the Company in a segregated custodial account under a tri-party agreement. The Company is required by the counterparty to maintain adequate collateral levels. In the event the collateral fair value falls below stipulated levels, the Company will pledge additional securities. The Company closely monitors collateral levels to ensure adequate levels are maintained, while mitigating the potential risk of over-collateralization in the event of counterparty default.

The following table presents the remaining contractual maturities of the Company's repurchase agreements as of December 31, 2018 and 2017, disaggregated by the class of collateral pledged.


The following table presents the assets and liabilities subject to an enforceable master netting arrangement, or repurchase agreements, as of December 31, 2018 and 2017. The swap agreements we have with our commercial banking customers are not subject to an enforceable master netting arrangement, and therefore, are excluded from this table. As previously mentioned, centrally cleared swap agreements between the Company and institutional counterparties are also excluded from this table.

| (dollars in thousands) | (i) |  | (ii) |  | (iii) $=$ (i)-(ii) |  | (iv) |  |  |  | (v) = (iii)-(iv) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Gross Amounts Recognized in the Statements of Condition |  | Gross Amounts Offset in the Statements of Condition |  | Net Amounts Presented in the Statements of Condition |  | Gross Amounts Not Offset in the Statements of Condition |  |  |  | Net Amount |  |
|  |  |  |  | $\begin{aligned} & \text { g } \\ & \text { ents } \\ & \text { ster } \\ & \text { gents } \end{aligned}$ |  |  |  | Value of ateral dged ${ }^{1}$ |  |  |
| December 31, 2018 |  |  |  |  |  |  |  |  |  |  |  |  |
| Assets: |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest Rate Swap Agreements: |  |  |  |  |  |  |  |  |  |  |  |  |
| Institutional Counterparties | \$ | 7,572 |  |  | \$ | - | \$ | 7,572 | \$ | 1,490 | \$ | - | \$ | 6,082 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest Rate Swap Agreements: |  |  |  |  |  |  |  |  |  |  |  |  |
| Institutional Counterparties |  | 1,490 |  | - |  | 1,490 |  | 1,490 |  | - |  | - |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Repurchase Agreements: |  |  |  |  |  |  |  |  |  |  |  |  |
| Private Institutions |  | 500,000 |  | - |  | 500,000 |  | - |  | 500,000 |  | - |
| Government Entities |  | 4,296 |  | - |  | 4,296 |  | - |  | 4,296 |  | - |
| Total Repurchase Agreements | \$ | 504,296 | \$ | - | \$ | 504,296 | \$ | - | \$ | 504,296 | \$ | - |

## December 31, 2017

Assets:

| Interest Rate Swap Agreements: |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Institutional Counterparties | \$ | 5,453 | \$ | - | \$ | 5,453 | \$ | 4,017 | \$ | - | \$ | 1,436 |
| Liabilities: |  |  |  |  |  |  |  |  |  |  |  |  |
| Interest Rate Swap Agreements: |  |  |  |  |  |  |  |  |  |  |  |  |
| Institutional Counterparties |  | 4,017 |  | - |  | 4,017 |  | 4,017 |  | - |  | - |
| Repurchase Agreements: |  |  |  |  |  |  |  |  |  |  |  |  |
| Private Institutions |  | 500,000 |  | - |  | 500,000 |  | - |  | 500,000 |  | - |
| Government Entities |  | 5,293 |  | - |  | 5,293 |  | - |  | 5,293 |  | - |
| Total Repurchase Agreements | \$ | 505,293 | \$ | - | \$ | 505,293 | \$ | - | \$ | 505,293 | \$ | - |

1 The application of collateral cannot reduce the net amount below zero. Therefore, excess collateral is not reflected in this table. For swap agreements with institutional counterparties, the fair value of investment securities pledged was less than $\$ 0.1$ million and $\$ 3.5$ million as of December 31, 2018 and 2017, respectively. For repurchase agreements with private institutions, the fair value of investment securities pledged was $\$ 526.7$ million and $\$ 563.3$ million as of December 31, 2018 and 2017, respectively. For repurchase agreements with government entities, the fair value of investment securities pledged was $\$ 6.8$ million and $\$ 6.9$ million as of December 31, 2018 and 2017, respectively.

## Note 20. Commitments, Contingencies, and Guarantees

The Company's credit commitments as of December 31, 2018 were as follows:

| (dollars in thousands) | December 31, 2018 |
| :--- | ---: |
| Unfunded Commitments to Extend Credit | $2,646,085$ |
| Standby Letters of Credit | 62,344 |
| Commercial Letters of Credit | 9,411 |
| Total | $2,717,840$ |

## Unfunded Commitments to Extend Credit

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of the terms or conditions established in the contract. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since commitments may expire without being drawn, the total commitment amount does not necessarily represent future cash requirements.

## Standby and Commercial Letters of Credit

Standby letters of credit are conditional commitments issued by the Company to guarantee the performance of a customer to a third party. Standby letters of credit generally become payable upon the failure of the customer to perform according to the terms of the underlying contract with the third party, while commercial letters of credit are issued specifically to facilitate commerce and typically result in the commitment being drawn on when the underlying transaction is consummated between the customer and a third party. The contractual amount of these letters of credit represents the maximum potential future payments guaranteed by the Company. The Company has recourse against the customer for any amount it is required to pay to a third party under a standby letter of credit, and generally holds cash or deposits as collateral on those standby letters of credit for which collateral is deemed necessary. Assets valued at $\$ 38.9$ million secured certain specifically identified standby letters of credit as of December 31, 2018. As of December 31, 2018, the standby and commercial letters of credit had remaining terms ranging from 1 to 14 months.

## Lease Commitments

A portion of the Company's headquarters' building is leased with a lease term through 2052. The Company leases certain other branch premises and equipment with lease terms extending through 2048. Most of the leases for premises provide for a base rent over a specified period with renewal options thereafter. Portions of certain properties are subleased for periods expiring in various years through 2033. Lease terms generally specify that the Company is to pay for taxes, maintenance, and other operating costs. Rental expense for all operating leases for the years ended December 31, 2018, 2017, and 2016 were as follows:

| (dollars in thousands) | $\mathbf{2 0 1 8}$ | $\mathbf{2 0 1 6}$ |  |  |
| :--- | :--- | ---: | ---: | ---: |
| Minimum Rentals | $\$$ | 19,326 | $\$$ | 18,331 |
| Sublease Rental Income | $\$$ | 18,377 |  |  |
| Total | $\$ 7,674)$ | $(7,056)$ | $(6,551)$ |  |

Future minimum payments for capital leases and non-cancelable operating leases with initial or remaining terms of one year or more consisted of the following as of December 31, 2018:

| (dollars in thousands) | Capital Leases |  | Operating Leases |  |
| :---: | :---: | :---: | :---: | :---: |
| 2019 | \$ | 825 | \$ | 12,455 |
| 2020 |  | 825 |  | 11,266 |
| 2021 |  | 825 |  | 11,025 |
| 2022 |  | 825 |  | 10,416 |
| 2023 |  | 825 |  | 9,482 |
| Thereafter |  | 23,930 |  | 104,877 |
| Total Future Minimum Lease Payments |  | 28,055 | \$ | 159,521 |
| Amounts Representing Interest |  | $(17,412)$ |  |  |
| Present Value of Net Future Minimum Lease Payments | \$ | 10,643 |  |  |

Minimum future rental income receivable under non-cancelable subleases was $\$ 12.7$ million as of December 31, 2018.

## Contingencies

The Company, along with other members of Visa, are parties to Loss and Judgment Sharing Agreements (the "Agreements"), which provide that the Company along with other member banks of Visa, will share, based on its proportionate interest in Visa, in any losses from certain litigation specified in the Agreements. In March 2008, Visa funded an escrow account from its initial public offering to settle claims covered under the Agreements. In connection with the initial public offering, the Company received restricted Class B common stock in Visa. Should the escrow account established by Visa not be sufficient to cover litigation claims specified in the Agreements, Visa is entitled to fund additional amounts to the escrow account by reducing each member bank's Class B conversion ratio to unrestricted Class A shares. As of December 31, 2018, management believes that the Company's indemnification of Visa, related to the costs of these lawsuits, will be sufficiently funded from the escrow account or through future reductions in the conversion ratio. See Note 3 Investment Securities and Note 17 Derivative Financial Instruments for more information.

On September 9, 2016, a purported class action lawsuit was filed by a Bank customer primarily alleging Bank of Hawaii's practice of determining whether consumer deposit accounts were overdrawn based on "available balance" (which deducts debit card transactions that have taken place but which have not yet been posted) was not properly applied or disclosed to customers. Additionally, on January 20, 2017, another purported class action lawsuit was filed by a Bank customer alleging Bank of Hawaii's practice of assessing a continuous negative balance overdraft fee on accounts remaining in a negative balance for extended periods of time beyond the date of the initial overdraft constituted a usurious interest charge and a breach of contract with the customer.

These lawsuits are similar to lawsuits filed against other financial institutions pertaining to available balance overdraft fee disclosures and continuing negative balance overdraft fees. Because of the many questions of fact and law that may arise in the future, the outcome of these legal proceedings are uncertain at this point. This is because, among other things, our potential liability depends on whether a class is certified and, if so, the composition and size of any such class, the applicable time period at issue, as well as an assessment of the appropriate measure of damages if we were to be found liable. Management disputes any wrongdoing and the cases are being vigorously defended.

In addition to the litigation noted above, the Company is subject to various other pending and threatened legal proceedings arising out of the normal course of business or operations. On at least a quarterly basis, the Company assesses its liabilities and contingencies in connection with outstanding legal proceedings utilizing the most recent information available. On a case-by-case basis, reserves are established for those legal claims for which it is probable that a loss will be incurred and the amount of such loss can be reasonably estimated. Based on information currently available, management believes that the eventual outcome of these claims against the Company will not be materially in excess of such amounts reserved by the Company. However, in the event of unexpected future developments, it is possible that the ultimate resolution of these matters may result in a loss that materially exceeds the reserves established by the Company.

## Risks Related to Representation and Warranty Provisions

The Company sells residential mortgage loans in the secondary market primarily to the Fannie Mae. The Company also pools FHA insured and VA guaranteed residential mortgage loans for sale to Ginnie Mae. These pools of FHA-insured and VA-guaranteed residential mortgage loans are securitized by Ginnie Mae. The agreements under which the Company sells residential mortgage loans to Fannie Mae or Ginnie Mae and the insurance or guaranty agreements with FHA and VA contain provisions that include various representations and warranties regarding the origination and characteristics of the residential mortgage loans. Although the specific representations and warranties vary among investors, insurance or guarantee agreements, they typically cover ownership of the loan, validity of the lien securing the loan, the absence of delinquent taxes or liens against the property securing the loan, compliance with loan criteria set forth in the applicable agreement, compliance with applicable federal, state, and local laws, and other matters. As of December 31, 2018, the unpaid principal balance of residential mortgage loans sold by the Company was $\$ 2.7$ billion. The agreements under which the Company sells residential mortgage loans require delivery of various documents to the investor or its document custodian. Although these loans are primarily sold on a non-recourse basis, the Company may be obligated to repurchase residential mortgage loans or reimburse investors for losses incurred if a loan review reveals that underwriting and documentation standards were potentially not met. Some agreements may require the Company to repurchase delinquent loans. Upon receipt of a repurchase request, the Company works with investors or insurers to arrive at a mutually agreeable resolution. Repurchase demands are typically reviewed on an individual loan by loan basis to validate the claims made by the investor or insurer and to determine if a contractually required repurchase event has occurred. The Company manages the risk associated with potential repurchases or other forms of settlement through its underwriting and quality assurance practices and by servicing mortgage loans to meet investor and secondary market standards. For the year ended December 31, 2018, the Company repurchased seven residential mortgage loans with an aggregate unpaid principal balance totaling $\$ 1.9$ million as a result of the representation and warranty provisions contained in these contracts. The loans were delinquent as to principal and interest at the time of repurchase, however, no material losses were incurred related to these repurchases. As of December 31, 2018, there were no pending repurchase requests related to representation and warranty provisions.

## Risks Relating to Residential Mortgage Loan Servicing Activities

In addition to servicing loans in the Company's portfolio, substantially all of the loans the Company sells to investors are sold with servicing rights retained. The Company also services loans originated by other mortgage loan originators. As servicer, the Company's primary duties are to: (1) collect payments due from borrowers; (2) advance certain delinquent payments of principal and interest; (3) maintain and administer any hazard, title, or primary mortgage insurance policies relating to the mortgage loans; (4) maintain any required escrow accounts for payment of taxes and insurance and administer escrow payments; and (5) foreclose on defaulted mortgage loans or, to the extent consistent with the documents governing a securitization, consider alternatives to foreclosure, such as loan modifications or short sales. Each agreement under which the Company acts as servicer generally specifies a standard of responsibility for actions taken by the Company in such capacity and provides protection against expenses and liabilities incurred by the Company when acting in compliance with the respective servicing agreements. However, if the Company commits a material breach of obligations as servicer, the Company may be subject to termination if the breach is not cured within a specified period following notice. The standards governing servicing and the possible remedies for violations of such standards vary by investor. These standards and remedies are determined by servicing guides issued by the investors as well as the contract provisions established between the investors and the Company. Remedies could include repurchase of an affected loan. For the year ended December 31, 2018, the Company had no repurchase requests related to loan servicing activities. As of December 31, 2018, there were no pending repurchase requests related to loan servicing activities.

Although to date repurchase requests related to representation and warranty provisions, and servicing activities have been limited, it is possible that requests to repurchase mortgage loans may increase in frequency as investors more aggressively pursue all means of recovering losses on their purchased loans. However, as of December 31, 2018, management believes that this exposure is not material due to the historical level of repurchase requests and loss trends and thus has not established a liability for losses related to mortgage loan repurchases. As of December 31, 2018, 99\% of the Company's residential mortgage loans serviced for investors were current. The Company maintains ongoing communications with investors and continues to evaluate this exposure by monitoring the level and number of repurchase requests as well as the delinquency rates in the loans sold to investors.

## Note 21. Fair Value of Assets and Liabilities

The following is a description of the valuation methodologies and key inputs used to measure assets and liabilities recorded at fair value on a recurring basis.

## Assets and Liabilities Measured at Fair Value on a Recurring Basis

## Investment Securities Available-for-Sale

Fair values of investment securities available-for-sale were primarily measured using information from a third-party pricing service. This service provides pricing information by utilizing evaluated pricing models supported with market data information. Standard inputs include benchmark yields, reported trades, broker/dealer quotes, issuer spreads, two-sided markets, benchmark securities, bids, offers, and reference data from market research publications. Level 1 investment securities are comprised of debt securities issued by the U.S. Treasury, as quoted prices were available, unadjusted, for identical securities in active markets. Level 2 investment securities were primarily comprised of debt securities issued by the Small Business Administration, states and municipalities, corporations, as well as mortgage-backed securities issued by government agencies and government-sponsored enterprises. Fair values were estimated primarily by obtaining quoted prices for similar assets in active markets or through the use of pricing models. In cases where there may be limited or less transparent information provided by the Company's third-party pricing service, fair value may be estimated by the use of secondary pricing services or through the use of non-binding third-party broker quotes.

On a quarterly basis, management reviews the pricing information received from the Company's third-party pricing service. This review process includes a comparison to a second source. The Company's third-party pricing service has also established processes for us to submit inquiries regarding quoted prices. Periodically, based on these reviews, the Company will challenge the quoted prices provided by the Company's third-party pricing service. The Company's third-party pricing service will review the inputs to the evaluation in light of the new market data presented by us. The Company's third-party pricing service may then affirm the original quoted price or may update the evaluation on a going-forward basis. Generally, we do not adjust the price from the third-party service provider. On a quarterly basis, management also reviews a sample of securities priced by the Company's third-party pricing service to review the significant assumptions and valuation methodologies used by the service. The information provided is comprised of market reference data, which may include reported trades; bids, offers, or broker-dealer dealer quotes; benchmark yields and spreads; as well as other reference data as appropriate. Based on this review, management determines whether the current placement of the security in the fair value hierarchy is appropriate or whether transfers may be warranted.

## Loans Held for Sale

The fair value of the Company's residential mortgage loans held for sale was determined based on quoted prices for similar loans in active markets, and therefore, is classified as a Level 2 measurement.

## Mortgage Servicing Rights

Mortgage servicing rights do not trade in an active market with readily observable market data. As a result, the Company estimates the fair value of mortgage servicing rights by using a discounted cash flow model to calculate the present value of estimated future net servicing income. The Company stratifies its mortgage servicing portfolio on the basis of loan type. The assumptions used in the discounted cash flow model are those that we believe market participants would use in estimating future net servicing income. Significant assumptions in the valuation of mortgage servicing rights include estimated loan repayment rates, the discount rate, servicing costs, and the timing of cash flows, among other factors. Mortgage servicing rights are classified as Level 3 measurements due to the use of significant unobservable inputs, as well as significant management judgment and estimation.

## Other Assets

Other assets recorded at fair value on a recurring basis are primarily comprised of investments related to deferred compensation arrangements. Quoted prices for these investments, primarily in mutual funds, are available in active markets. Thus, the Company's investments related to deferred compensation arrangements are classified as Level 1 measurements in the fair value hierarchy.

Derivative financial instruments recorded at fair value on a recurring basis are comprised of interest rate lock commitments ("IRLCs"), forward commitments, interest rate swap agreements, foreign exchange contracts, and Visa Class B to Class A shares conversion rate swap agreements. The fair values of IRLCs are calculated based on the value of the underlying loan held for sale, which in turn is based on quoted prices for similar loans in the secondary market. However, this value is adjusted by a factor which considers the likelihood that the loan in a locked position will ultimately close. This factor, the closing ratio, is derived from the Bank's internal data and is adjusted using significant management judgment. As such, IRLCs are classified as Level 3 measurements. Forward commitments are classified as Level 2 measurements as they are primarily based on quoted prices from the secondary market based on the settlement date of the contracts, interpolated or extrapolated, if necessary, to estimate a fair value as of the end of the reporting period. The fair values of interest rate swap agreements are calculated using a discounted cash flow approach and utilize Level 2 observable inputs such as a market yield curve, effective date, maturity date, notional amount, and stated interest rate. In addition, the Company includes in its fair value calculation a credit factor adjustment which is based primarily on management judgment. Thus, interest rate swap agreements are classified as a Level 3 measurement. The fair values of foreign exchange contracts are calculated using the Bank's multi-currency accounting system which utilizes contract specific information such as currency, maturity date, contractual amount, and strike price, along with market data information such as the spot rates of specific currency and yield curves. Foreign exchange contracts are classified as Level 2 measurements because while they are valued using the Bank's multi-currency accounting system, significant management judgment or estimation is not required. The fair value of the Visa Class B restricted shares to Class A unrestricted common shares conversion rate swap agreements represent the amount owed by the Company to the buyer of the Visa Class B shares as a result of a reduction of the conversion ratio subsequent to the sales date. As of December 31, 2018 and 2017, the conversion rate swap agreements were valued at zero as reductions to the conversion ratio were neither probable nor reasonably estimable by management. See Note 17 Derivative Financial Instruments for more information.

The Company is exposed to credit risk if borrowers or counterparties fail to perform. The Company seeks to minimize credit risk through credit approvals, limits, monitoring procedures, and collateral requirements. The Company generally enters into transactions with borrowers and counterparties that carry high quality credit ratings. Credit risk associated with borrowers or counterparties as well as the Company's non-performance risk is factored into the determination of the fair value of derivative financial instruments.

The table below presents the balances of assets and liabilities measured at fair value on a recurring basis as of December 31, 2018 and 2017:

|  | Quoted Prices In Active Markets for Identical Assets or Liabilities (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) | Total |
| :---: | :---: | :---: | :---: | :---: |
| (dollars in thousands) |  |  |  | Total |

## December 31, 2018

Assets:
Investment Securities Available-for-Sale

| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 972 | \$ | 391,429 | \$ | - | \$ | 392,401 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Debt Securities Issued by States and Political Subdivisions |  | - |  | 563,996 |  | - |  | 563,996 |
| Debt Securities Issued by U.S. Government-Sponsored Enterprises |  | - |  | 56 |  | - |  | 56 |
| Debt Securities Issued by Corporations |  | - |  | 223,140 |  | - |  | 223,140 |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | - |  | 190,442 |  | - |  | 190,442 |
| Residential - U.S. Government-Sponsored Enterprises |  | - |  | 578,527 |  | - |  | 578,527 |
| Commercial - Government Agencies |  | - |  | 59,380 |  | - |  | 59,380 |
| Total Mortgage-Backed Securities |  | - |  | 828,349 |  | - |  | 828,349 |
| Total Investment Securities Available-for-Sale |  | 972 |  | 2,006,970 |  | - |  | 2,007,942 |
| Loans Held for Sale |  | - |  | 10,987 |  | - |  | 10,987 |
| Mortgage Servicing Rights |  | - |  | - |  | 1,290 |  | 1,290 |
| Other Assets |  | 31,871 |  | - |  | - |  | 31,871 |
| Derivatives ${ }^{1}$ |  | - |  | 812 |  | 13,792 |  | 14,604 |
| Total Assets Measured at Fair Value on a |  |  |  |  |  |  |  |  |
| Recurring Basis as of December 31, 2018 | \$ | 32,843 | \$ | 2,018,769 | \$ | 15,082 | \$ | 2,066,694 |

## Liabilities:

| Derivatives $^{1}$ | $\$$ | - | $\$$ | 371 | $\$$ | 9,376 | $\$$ | 9,747 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Total Liabilities Measured at Fair Value on a <br> Recurring Basis as of December 31, 2018 | $\$$ | - | $\$$ | 371 | $\$$ | 9,376 | $\$$ | 9,747 |

December 31, 2017

## Assets:

| Debt Securities Issued by the U.S. Treasury and Government Agencies | \$ | 538 | \$ | 425,392 | \$ | - | \$ | 425,930 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Debt Securities Issued by States and Political Subdivisions |  | - |  | 627,019 |  | - |  | 627,019 |
| Debt Securities Issued by Corporations |  | - |  | 266,111 |  | - |  | 266,111 |
| Mortgage-Backed Securities: |  |  |  |  |  |  |  |  |
| Residential - Government Agencies |  | - |  | 235,360 |  | - |  | 235,360 |
| Residential - U.S. Government-Sponsored Enterprises |  | - |  | 609,812 |  | - |  | 609,812 |
| Commercial - Government Agencies |  | - |  | 68,747 |  | - |  | 68,747 |
| Total Mortgage-Backed Securities |  | - |  | 913,919 |  | - |  | 913,919 |
| Total Investment Securities Available-for-Sale |  | 538 |  | 2,232,441 |  | - |  | 2,232,979 |
| Loans Held for Sale |  | - |  | 19,231 |  | - |  | 19,231 |
| Mortgage Servicing Rights |  | - |  | - |  | 1,454 |  | 1,454 |
| Other Assets |  | 29,230 |  | - |  | - |  | 29,230 |
| Derivatives ${ }^{1}$ |  | - |  | 146 |  | 10,372 |  | 10,518 |
| Total Assets Measured at Fair Value on a |  |  |  |  |  |  |  |  |
| Recurring Basis as of December 31, 2017 | \$ | 29,768 | \$ | 2,251,818 | \$ | 11,826 | \$ | 2,293,412 |
| Liabilities: |  |  |  |  |  |  |  |  |
| Derivatives ${ }^{1}$ | \$ | - | \$ | 215 | \$ | 9,478 | \$ | 9,693 |
| Total Liabilities Measured at Fair Value on a Recurring Basis as of December 31, 2017 | \$ | - | \$ | 215 | \$ | 9,478 | \$ | 9,693 |

[^11]For the years ended December 31, 2018 and 2017, the changes in Level 3 assets and liabilities measured at fair value on a recurring basis were as follows:

| (dollars in thousands) | Mortgage Servicing Rights ${ }^{1}$ |  | Net Derivative Assets and Liabilities ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Year Ended December 31, 2018 |  |  |  |  |
| Balance as of January 1, 2018 | \$ | 1,454 | \$ | 894 |
| Realized and Unrealized Net Gains (Losses): |  |  |  |  |
| Included in Net Income |  | (164) |  | 3,534 |
| Transfers to Loans Held for Sale |  | - |  | $(3,451)$ |
| Variation Margin Payments |  | - |  | 3,439 |
| Balance as of December 31, 2018 | \$ | 1,290 | \$ | 4,416 |
| Total Unrealized Net Gains (Losses) Included in Net Income Related to Assets Still Held as of December 31, 2018 | \$ | - | \$ | 4,416 |
|  |  |  |  |  |
| Year Ended December 31, 2017 |  |  |  |  |
| Balance as of January 1,2017 | \$ | 1,655 | \$ | 1,053 |
| Realized and Unrealized Net Gains (Losses): |  |  |  |  |
| Included in Net Income |  | (201) |  | 5,648 |
| Transfers to Loans Held for Sale |  | - |  | $(5,921)$ |
| Variation Margin Payments | \$ | - | \$ | 114 |
| Balance as of December 31, 2017 | \$ | 1,454 | \$ | 894 |
| Total Unrealized Net Gains (Losses) Included in Net Income Related to Assets Still Held as of December 31, 2017 | \$ | - | \$ | 894 |





For Level 3 assets and liabilities measured at fair value on a recurring or nonrecurring basis as of December 31, 2018 and 2017, the significant unobservable inputs used in the fair value measurements were as follows:

| (dollars in thousands) | Valuation Technique | Significant Unobservable Inputs (weighted-average) |  |  | Fair Value |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Description | December 31, |  | December 31, |  |  |  |
|  |  |  | 2018 | 2017 |  | 2018 |  | 2017 |
| Mortgage Servicing Rights | Discounted Cash Flow | Constant Prepayment Rate ${ }^{1}$ | 7.01\% | 8.50\% | \$ | 30,508 | \$ | 28,170 |
|  |  | Discount Rate ${ }^{2}$ | 9.59\% | 8.87\% |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Net Derivative Assets and Liabilities: |  |  |  |  |  |  |  |  |
| Interest Rate Lock Commitments | Pricing Model | Closing Ratio | 89.00\% | 93.25\% | \$ | 871 | \$ | 789 |
| Interest Rate Swap Agreements | Discounted Cash Flow | Credit Factor | 0.06\% | 0.10\% | \$ | 3,545 | \$ | 105 |

Represents annualized loan prepayment rate assumption.
2 Derived from multiple interest rate scenarios that incorporate a spread to a market yield curve and market volatilities.
The significant unobservable inputs used in the fair value measurement of the Company's mortgage servicing rights are the weighted-average constant prepayment rate and weighted-average discount rate. Significant increases (decreases) in any of those inputs in isolation could result in a significantly lower (higher) fair value measurement. Although the constant prepayment rate and the discount rate are not directly interrelated, they generally move in opposite directions of each other.

The Company estimates the fair value of mortgage servicing rights by using a discounted cash flow model to calculate the present value of estimated future net servicing income. The Company's Treasury Division enters observable and unobservable inputs into the model to arrive at an estimated fair value. To assess the reasonableness of the fair value measurement, the Treasury Division performs a back-test by comparing the model to historical prepayment data. The Treasury Division also compares the fair value of the Company's mortgage servicing rights to a value calculated by an independent third party. Discussions are held with members from the Treasury, Mortgage Banking, and Controllers Divisions, along with the independent third party to discuss and reconcile the fair value estimates and key assumptions used by the respective parties in arriving at those estimates. A subcommittee of the Company's Asset/Liability Management Committee is responsible for providing oversight over the valuation methodology and key assumptions.

The significant unobservable input used in the fair value measurement of the Company's IRLCs is the closing ratio, which represents the percentage of loans currently in a lock position which management estimates will ultimately close. Generally, the fair value of an IRLC is positive (negative) if the prevailing interest rate is lower (higher) than the IRLC rate. Therefore, an increase in the closing ratio (i.e., higher percentage of loans are estimated to close) will increase the gain or loss. The closing ratio is largely dependent on the loan processing stage that a loan is currently in and the change in prevailing interest rates from the time of the rate lock. The closing ratio is computed by our secondary marketing system using historical data and the ratio is periodically reviewed by the Company for reasonableness.

The unobservable input used in the fair value measurement of the Company's interest rate swap agreements is the credit factor. This factor represents the risk that a counterparty is either unable or unwilling to settle a transaction in accordance with the underlying contractual terms. A significant increase (decrease) in the credit factor could result in a significantly lower (higher) fair value measurement. The credit factor is determined by the Treasury Division based on the risk rating assigned to each counterparty in which the Company holds a net asset position. The Company's Credit Policy Committee periodically reviews and approves the Expected Default Frequency of the Economic Capital Model for Credit Risk. The Expected Default Frequency is used as the credit factor for interest rate swap agreements.

## Assets and Liabilities Measured at Fair Value on a Nonrecurring Basis

The Company may be required periodically to measure certain assets and liabilities at fair value on a nonrecurring basis in accordance with GAAP. These adjustments to fair value usually result from the application of lower-of-cost-or-fair value accounting or impairment write-downs of individual assets. For the years ended December 31, 2018 and 2017, there were no material adjustments to fair value for the Company's assets and liabilities measured at fair value on a nonrecurring basis in accordance with GAAP.

## Fair Value Option

The Company elects the fair value option for all residential mortgage loans held for sale. This election allows for a more effective offset of the changes in fair values of the loans held for sale and the derivative financial instruments used to financially hedge them without having to apply complex hedge accounting requirements. As noted above, the fair value of the Company's residential mortgage loans held for sale was determined based on quoted prices for similar loans in active markets.

The following table reflects the difference between the aggregate fair value and the aggregate unpaid principal balance of the Company's residential mortgage loans held for sale as of December 31, 2018 and 2017.
\(\left.\begin{array}{llll}Aggregate Fair Value <br>
Less Aggregate <br>

Unpaid Principal\end{array}\right]\)| Aggregate <br> Fair Value |
| :---: | | Aggregate |
| :---: |
| Unpaid Principal |

December 31, 2017
Loans Held for Sale

| \$ | 19,231 | \$ |
| :--- | :--- | :--- | :--- | :--- |

Changes in the estimated fair value of residential mortgage loans held for sale are reported as a component of mortgage banking income in the Company's consolidated statements of income. For the years ended December 31, 2018 and 2017, the net gains or losses from the change in fair value of the Company's residential mortgage loans held for sale were not material.

## Financial Instruments Not Recorded at Fair Value on a Recurring Basis

The following presents the carrying amount, fair value, and placement in the fair value hierarchy of the Company's financial instruments not recorded at fair value on a recurring basis as of December 31, 2018 and 2017. This table excludes financial instruments for which the carrying amount approximates fair value. For short-term financial assets such as cash and cash equivalents, the carrying amount is a reasonable estimate of fair value due to the relatively short time between the origination of the instrument and its expected realization. For non-marketable equity securities such as Federal Home Loan Bank and Federal Reserve Bank stock, the carrying amount is a reasonable estimate of fair value as these securities can only be redeemed or sold at their par value and only to the respective issuing government supported institution or to another member institution. For financial liabilities such as noninterest-bearing demand, interest-bearing demand, and savings deposits, the carrying amount is a reasonable estimate of fair value due to these products having no stated maturity.

|  |  | Fair Value Measurements |
| :--- | :--- | :--- | :--- |

 using an exit price notion. The fair value of loans as of December 31, 2017 was measured using an entry price notion.
2 Excludes capitalized lease obligations.

## Note 22. Revenue Recognition

On January 1, 2018, the Company adopted ASU No. 2014-09 "Revenue from Contracts with Customers" (Topic 606) and all subsequent ASUs that modified Topic 606. As stated in Note 1 Summary of Significant Accounting Policies, the implementation of the new standard did not have a material impact on the measurement or recognition of revenue; as such, a cumulative effect adjustment to opening retained earnings was not deemed necessary. Results for reporting periods beginning after January 1, 2018 are presented under Topic 606, while prior period amounts were not adjusted and continue to be reported in accordance with the Company's historic accounting under Topic 605.

Topic 606 does not apply to revenue associated with financial instruments, including revenue from loans and securities, which comprise the majority of the Company's revenue. In addition, certain noninterest income streams such as fees associated with mortgage servicing rights, financial guarantees, derivatives, and certain credit card fees are also not in the scope of the new guidance. Topic 606 is applicable to noninterest revenue streams such as trust and asset management income, deposit related fees, interchange fees, merchant income, and annuity and insurance commissions. However, the recognition of these revenue streams did not change significantly upon adoption of Topic 606. Substantially all of the Company's revenue is generated from contracts with customers. Noninterest revenue streams in-scope of Topic 606 are discussed below.

## Trust and Asset Management

Trust and asset management income is primarily comprised of fees earned from the management and administration of trusts and other customer assets. The Company's performance obligation is generally satisfied over time and the resulting fees are recognized monthly, based upon the month-end market value of the assets under management and the applicable fee rate. Payment is generally received a few days after month end through a direct charge to customers' accounts. The Company does not earn performance-based incentives. Optional services such as real estate sales and tax return preparation services are also available to existing trust and asset management customers. The Company's performance obligation for these transactional-based services is generally satisfied, and related revenue recognized, at a point in time (i.e., as incurred). Payment is received shortly after services are rendered.

## Service Charges on Deposit Accounts

Service charges on deposit accounts consist of account analysis fees (i.e., net fees earned on analyzed business and public checking accounts), monthly service fees, check orders, and other deposit account related fees. The Company's performance obligation for account analysis fees and monthly service fees is generally satisfied, and the related revenue recognized, over the period in which the service is provided. Check orders and other deposit account related fees are largely transactional based, and therefore, the Company's performance obligation is satisfied and related revenue recognized, at a point in time. Payment for service charges on deposit accounts is primarily received immediately or in the following month through a direct charge to customers' accounts.

## Fees, Exchange, and Other Service Charges

Fees, exchange, and other service charges are primarily comprised of debit and credit card income, ATM fees, merchant services income, and other service charges. Debit and credit card income is primarily comprised of interchange fees earned whenever the Company's debit and credit cards are processed through card payment networks such as Visa. ATM fees are primarily generated when a Company cardholder uses a non-Company ATM or a non-Company cardholder uses a Company ATM. Merchant services income mainly represents fees charged to merchants to process their debit and credit card transactions, in addition to account management fees. Other service charges include revenue from processing wire transfers, bill pay service, cashier's checks, and other services. The Company's performance obligation for fees, exchange, and other service charges are largely satisfied, and related revenue recognized, when the services are rendered or upon completion. Payment is typically received immediately or in the following month.

## Annuity and Insurance

Annuity and insurance income primarily consists of commissions received on annuity product sales. The Company acts as an intermediary between the Company's customer and the insurance carrier. The Company's performance obligation is generally satisfied upon the issuance of the annuity policy. Shortly after the policy is issued, the carrier remits the commission payment to the Company, and the Company recognizes the revenue. The Company does not earn a significant amount of trailer fees on annuity sales. The majority of the trailer fees relates to variable annuity products and are calculated based on a percentage of market value at period end. Revenue is not recognized until the annuity's market value can be determined.

## Other

Other noninterest income consists of other recurring revenue streams such as commissions from sales of mutual funds and other investments, investment advisor fees from the Company's Managed Account Platform Services (MAPS) wealth management product, safety deposit box rental fees, and other miscellaneous revenue streams. Commissions from the sale of mutual funds and other investments are recognized on trade date, which is when the Company has satisfied its performance obligation. The Company also receives periodic service fees (i.e., trailers) from mutual fund companies typically based on a percentage of net asset value. Trailer revenue is recorded over time, usually monthly or quarterly, as net asset value is determined. Investment advisor fees from the MAPS wealth management product is earned over time and based on an annual percentage rate of the net asset value. The investment advisor fees are charged to the customer's account in advance on the first month of the quarter, and the revenue is recognized over the following three-month period. Safe deposit box rental fees are charged to the customer on an annual basis and recognized upon receipt of payment. The Company determined that since rentals and renewals occur fairly consistently over time, revenue is recognized on a basis consistent with the duration of the performance obligation.

The following presents noninterest income, segregated by revenue streams in-scope and out-of-scope of Topic 606, for the years ended December 31, 2018, 2017, and 2016.

| (dollars in thousands) | Year Ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  |
| Noninterest Income |  |  |  |  |  |  |
| In-scope of Topic 606: |  |  |  |  |  |  |
| Trust and Asset Management | \$ | 43,877 | \$ | 45,430 | \$ | 46,203 |
| Service Charges on Deposit Accounts |  | 13,165 |  | 15,191 |  | 15,498 |
| Fees, Exchange, and Other Service Charges |  | 46,350 |  | 44,560 |  | 44,021 |
| Annuity and Insurance |  | 5,615 |  | 6,444 |  | 6,473 |
| Other |  | 9,652 |  | 8,966 |  | 8,795 |
| Noninterest Income (in-scope of Topic 606) |  | 118,659 |  | 120,591 |  | 120,990 |
| Noninterest Income (out-of-scope of Topic 606) |  | 50,264 |  | 64,826 |  | 76,353 |
| Total Noninterest Income | \$ | 168,923 | \$ | 185,417 | \$ | 197,343 |

## Contract Balances

A contract asset balance occurs when an entity performs a service for a customer before the customer pays consideration (resulting in a contract receivable) or before payment is due (resulting in a contract asset). A contract liability balance is an entity's obligation to transfer a service to a customer for which the entity has already received payment (or payment is due) from the customer. The Company's noninterest revenue streams are largely based on transactional activity, or standard month-end revenue accruals such as asset management fees based on month-end market values. Consideration is often received immediately or shortly after the Company satisfies its performance obligation and revenue is recognized. The Company does not typically enter into longterm revenue contracts with customers, and therefore, does not experience significant contract balances. As of December 31, 2018 and 2017, the Company did not have any significant contract balances.

## Contract Acquisition Costs

In connection with the adoption of Topic 606, an entity is required to capitalize, and subsequently amortize into expense, certain incremental costs of obtaining a contract with a customer if these costs are expected to be recovered. The incremental costs of obtaining a contract are those costs that an entity incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained (for example, sales commission). The Company utilizes the practical expedient which allows entities to immediately expense contract acquisition costs when the asset that would have resulted from capitalizing these costs would have been amortized in one year or less. Upon adoption of Topic 606, the Company did not capitalize any contract acquisition cost.

## Note 23. Bank of Hawaii Corporation Financial Statements

Condensed financial statements of the Parent were as follows:
Condensed Statements of Comprehensive Income

| (dollars in thousands) | Year Ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  |
| Income |  |  |  |  |  |  |
| Dividends from Bank of Hawaii | \$ | 185,000 | \$ | 130,000 | \$ | 120,000 |
| Investment Securities Gains (Losses), Net |  | (819) |  | 12,027 |  | (340) |
| Other Income |  | 198 |  | 204 |  | 279 |
| Total Income |  | 184,379 |  | 142,231 |  | 119,939 |
| Noninterest Expense |  |  |  |  |  |  |
| Intercompany Salaries and Services |  | 734 |  | 720 |  | 705 |
| Other Expenses |  | 1,701 |  | 1,401 |  | 1,392 |
| Total Noninterest Expense |  | 2,435 |  | 2,121 |  | 2,097 |
| Income Before Income Tax Benefit and Equity in Undistributed Income of Subsidiaries |  | 181,944 |  | 140,110 |  | 117,842 |
| Income Tax Benefit (Expense) |  | 2,229 |  | $(3,557)$ |  | 2,137 |
| Equity in Undistributed Income of Subsidiaries |  | 35,429 |  | 48,119 |  | 61,482 |
| Net Income | \$ | 219,602 | \$ | 184,672 | \$ | 181,461 |
| Comprehensive Income | \$ | 210,751 | \$ | 183,863 | \$ | 171,112 |

## Condensed Statements of Condition

| (dollars in thousands) | December 31, 2018 |  | $\begin{array}{r} \hline \text { December 31, } \\ 2017 \\ \hline \end{array}$ |  |
| :---: | :---: | :---: | :---: | :---: |
| Assets |  |  |  |  |
| Cash with Bank of Hawaii | \$ | 52,731 | \$ | 49,669 |
| Investment Securities Held-to-Maturity |  | 4,999 |  | 4,986 |
| Goodwill |  | 14,129 |  | 14,129 |
| Income Taxes Receivable and Deferred Tax Assets |  | 1,520 |  | 2,567 |
| Other Assets |  | 8,468 |  | 8,233 |
| Equity in Net Assets of Subsidiaries |  | 1,195,132 |  | 1,161,037 |
| Total Assets | \$ | 1,276,979 | \$ | 1,240,621 |
|  |  |  |  |  |
| Liabilities |  |  |  |  |
| Income Taxes Payable | \$ | 60 | \$ | 517 |
| Other Liabilities |  | 8,719 |  | 8,236 |
| Total Liabilities |  | 8,779 |  | 8,753 |
| Shareholders' Equity |  | 1,268,200 |  | 1,231,868 |
| Total Liabilities and Shareholders' Equity | \$ | 1,276,979 | \$ | 1,240,621 |

## Condensed Statements of Cash Flows

| (dollars in thousands) | Year Ended December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  |
| Operating Activities |  |  |  |  |  |  |
| Net Income | \$ | 219,602 | \$ | 184,672 | \$ | 181,461 |
| Adjustments to Reconcile Net Income to Net Cash Provided by Operating Activities: |  |  |  |  |  |  |
| Share-Based Compensation |  | 630 |  | 573 |  | 558 |
| Net (Gains) Losses on Sales of Investment Securities |  | 819 |  | $(12,027)$ |  | 340 |
| Equity in Undistributed Income of Subsidiaries |  | $(35,429)$ |  | $(48,119)$ |  | $(61,482)$ |
| Net Change in Other Assets and Other Liabilities |  | 870 |  | $(6,477)$ |  | 1,508 |
| Net Cash Provided by Operating Activities |  | 186,492 |  | 118,622 |  | 122,385 |
|  |  |  |  |  |  |  |
| Investing Activities |  |  |  |  |  |  |
| Capital Distribution from BOHC Investment Fund LLC |  | - |  | 613 |  | - |
| Capital Contributions to the Bank |  | - |  | $(12,467)$ |  | - |
| Proceeds from (Expenses related to) Sales of Investment Securities |  | (819) |  | 12,027 |  | (340) |
| Net Cash Provided by (Used in) Investing Activities |  | (819) |  | 173 |  | (340) |
|  |  |  |  |  |  |  |
| Financing Activities |  |  |  |  |  |  |
| Proceeds from Issuance of Common Stock |  | 7,873 |  | 13,101 |  | 9,079 |
| Repurchase of Common Stock |  | $(91,988)$ |  | $(47,076)$ |  | $(61,807)$ |
| Cash Dividends Paid |  | $(98,496)$ |  | $(87,066)$ |  | $(81,157)$ |
| Net Cash Used in Financing Activities |  | $(182,611)$ |  | $(121,041)$ |  | $(133,885)$ |
|  |  |  |  |  |  |  |
| Net Change in Cash and Cash Equivalents |  | 3,062 |  | $(2,246)$ |  | $(11,840)$ |
| Cash and Cash Equivalents at Beginning of Period |  | 49,669 |  | 51,915 |  | 63,755 |
| Cash and Cash Equivalents at End of Period | \$ | 52,731 | \$ | 49,669 | \$ | 51,915 |

## Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure

None.

## Item 9A. Controls and Procedures

## Disclosure Controls and Procedures

The Company's management, including the Chief Executive Officer and Chief Financial Officer, conducted an evaluation of the effectiveness of the Company's disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of December 31, 2018. The Company's disclosure controls and procedures are designed to ensure that information required to be disclosed by the Company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized, and reported within the time periods specified in the U.S. Securities and Exchange Commission's rules and forms, and that such information is accumulated and communicated to the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, to allow timely decisions regarding required disclosure. Based on this evaluation, the Chief Executive Officer and Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective as of December 31, 2018.

## Management's Annual Report on Internal Control over Financial Reporting

Management of the Company is responsible for establishing and maintaining effective internal control over financial reporting. Internal control is designed to provide reasonable assurance to the Company's management and board of directors regarding the preparation of reliable published financial statements. Internal control over financial reporting includes self-monitoring mechanisms, and actions are taken to correct deficiencies as they are identified.

Because of inherent limitations in any system of internal control, no matter how well designed, misstatements due to error or fraud may occur and not be detected, including the possibility of the circumvention or overriding of controls. Accordingly, even effective internal control over financial reporting can provide only reasonable assurance with respect to financial statement preparation. Further, because of changes in conditions, internal control effectiveness may vary over time.

Management assessed the Company's internal control over financial reporting as of December 31, 2018. This assessment was based on criteria for effective internal control over financial reporting described in "Internal Control - Integrated Framework" issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on this assessment, the Chief Executive Officer and Chief Financial Officer assert that the Company maintained effective internal control over financial reporting as of December 31, 2018 based on the specified criteria.

The effectiveness of the Company's internal control over financial reporting as of December 31, 2018 has been audited by Ernst \& Young LLP, the independent registered public accounting firm who also has audited the Company's consolidated financial statements included in this Annual Report on Form 10-K. Ernst \& Young LLP's attestation report on the Company's internal control over financial reporting appears on the following page and is incorporated by reference herein.

## Changes in Internal Control over Financial Reporting

There were no changes in the Company's internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended December 31, 2018 that have materially affected or are reasonably likely to materially affect the Company's internal control over financial reporting.

## Report of Independent Registered Public Accounting Firm

To the Shareholders and the Board of Directors of Bank of Hawaii Corporation

## Opinion on Internal Control Over Financial Reporting

We have audited Bank of Hawaii Corporation and subsidiaries’ internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, Bank of Hawaii Corporation and subsidiaries (the "Company") maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statements of condition of the Company as of December 31, 2018 and 2017, the related consolidated statements of income, comprehensive income, shareholders' equity and cash flows for each of the three years in the period ended December 31, 2018, and the related notes and our report dated March 1 , 2019 expressed an unqualified opinion thereon.

## Basis for Opinion

The Company's management is responsible 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 Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the 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 audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

## 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.
/s/ Ernst \& Young LLP
Honolulu, Hawaii
March 1, 2019

## Item 9B. Other Information

None.

## Part III

## Item 10. Directors, Executive Officers and Corporate Governance

Certain information regarding the executive officers of the Parent is included under the caption "Executive Officers of the Registrant" in Part I, Item 1 of this report. Other information required by this Item is incorporated herein by reference to the Bank of Hawaii Corporation Proxy Statement for the 2019 annual meeting of shareholders to be filed with the SEC within 120 days after the end of the Company's fiscal year to which this report relates.

The Parent's Board of Directors has determined that Mark A. Burak, Robert Huret, Victor K. Nichols, and Raymond P. Vara, Jr., members of the Parent's Audit and Risk Committee, are audit committee financial experts within the meaning of Item 407(d)(5) of Regulation S-K. All members on the Audit and Risk Committee are independent and are financially literate within the meaning of Section 10A(m)(3) of the Exchange Act and the rules of the New York Stock Exchange, as applicable.

The Parent has adopted a written code of ethics within the meaning of Item 406 of Regulation S-K that applies to the Parent's Chief Executive Officer, Chief Financial Officer, and Chief Accounting Officer. A copy of the Code of Ethics for Senior Financial Officers is available on the Company's website, www.boh.com. The Parent intends to provide disclosure of any change to, or waiver from, the Parent's Code of Ethics for Senior Financial Officers via its website.

## Item 11. Executive Compensation

The information required by this Item is incorporated herein by reference to the Bank of Hawaii Corporation Proxy Statement for the 2019 annual meeting of shareholders to be filed with the SEC within 120 days after the end of the Company's fiscal year

## Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters

The information required by this Item is incorporated herein by reference to the Bank of Hawaii Corporation Proxy Statement for the 2019 annual meeting of shareholders to be filed with the SEC within 120 days after the end of the Company's fiscal year.

## Item 13. Certain Relationships and Related Transactions, and Director Independence

The information required by this Item is incorporated herein by reference to the Bank of Hawaii Corporation Proxy Statement for the 2019 annual meeting of shareholders to be filed with the SEC within 120 days after the end of the Company's fiscal year

## Item 14. Principal Accounting Fees and Services

The information required by this Item is incorporated herein by reference to the Bank of Hawaii Corporation Proxy Statement for the 2019 annual meeting of shareholders to be filed with the SEC within 120 days after the end of the Company's fiscal year.

## Part IV

## Item 15. Exhibits, Financial Statement Schedules

(a) Financial Statements and Schedules

The following Consolidated Financial Statements of Bank of Hawaii Corporation and Subsidiaries are included in Item 8 of this report:
Consolidated Statements of Income - Years ended December 31, 2018, 2017, and 2016
Consolidated Statements of Comprehensive Income - Years ended December 31, 2018, 2017, and 2016
Consolidated Statements of Condition - December 31, 2018 and 2017
Consolidated Statements of Shareholders’ Equity - Years ended December 31, 2018, 2017, and 2016
Consolidated Statements of Cash Flows - Years ended December 31, 2018, 2017, and 2016
Notes to Consolidated Financial Statements

All other schedules to the Consolidated Financial Statements stipulated by Article 9 of Regulation S-X and all other schedules to the financial statements of the registrant required by Article 5 of Regulation S-X are not required under the related instructions or are inapplicable and, therefore, have been omitted.

## Exhibit Table

Exhibit
Number
3.2 Certificate of Amendment of Certificate of Incorporation of Bank of Hawaii Corporation (incorporated by reference from Exhibit 3.1 to Bank of Hawaii Corporation's Current Report on Form 8-K filed on April 30, 2008 (the "April 30, 2008 8-K")).

Amended and Restated By-Laws of Bank of Hawaii Corporation (incorporated by reference from Exhibit 3.2 to Bank of Hawaii Corporation's Current Report on Form 8-K filed on November 19, 2013).
3.5 Amended and Restated By-Laws of Bank of Hawaii Corporation (incorporated by reference from Exhibit 3.2 to Bank of Hawaii Corporation’s Current Report on Form 8-K filed on October 24, 2018).
4.1 Instruments defining the rights of holders of long-term debt of Bank of Hawaii Corporation and its consolidated subsidiaries are not filed as exhibits because the amount of debt authorized under any such instruments does not exceed $10 \%$ of the total assets of Bank of Hawaii Corporation and its consolidated subsidiaries. Bank of Hawaii Corporation agrees to furnish a copy of any such instrument to the Commission upon request.
10.1 Bank of Hawaii Corporation's Executive Incentive Plan, as amended (incorporated by reference from Exhibit 10.2 to the 2005 10-K).*
10.2 Bank of Hawaii Corporation’s Executive Base Salary Deferral Plan (incorporated by reference from Exhibit 10.1 to the Bank of Hawaii Corporation's Current Report on Form 8-K filed on December 22, 2005).*
10.3 Bank of Hawaii Corporation’s Directors' Deferred Compensation Plan, as amended (incorporated by reference from Exhibit 10.7 to the 2005 10K).*
10.4 Bank of Hawaii Corporation's Director Stock Compensation Program, as amended (incorporated by reference from Exhibit 10.8 to the 2005 10K).*
10.5 Bank of Hawaii Corporation's Amended and Restated Director Stock Compensation Plan (incorporated by reference from Appendix B to Bank of Hawaii Corporation's Definitive Proxy Statement on Schedule 14A for the 2005 Annual Meeting of Shareholders filed on March 17, 2005).*
10.7 Bank of Hawaii Corporation’s 2004 Stock and Incentive Compensation Plan (incorporated by reference from Appendix C to Bank of Hawaii Corporation's Definitive Proxy Statement on Schedule 14A for the 2004 Annual Meeting of Shareholders, as filed on March 18, 2004).*
10.8 Amendment 2007-1 to the Bank of Hawaii Corporation 2004 Stock and Incentive Compensation Plan (incorporated by reference from Exhibit 10.13 to the Bank of Hawaii Corporation's Annual Report on Form 10-K, as filed on February 25, 2008 (the "2007 10-K")).*
10.9 Amendment 2007-1 to the Bank of Hawaii Corporation Executive Incentive Plan (incorporated by reference from Exhibit 10.16 to the 2007 10K).*
10.10 Board Resolution for Amendment to the Restricted Stock and Option Awards under the Bank of Hawaii Corporation's Amended and Restated Director Stock Compensation Plan (incorporated by reference from Exhibit 10.1 to Bank of Hawaii Corporation’s Current Report on Form 8-K, as filed on July 28, 2008).*
10.11 Bank of Hawaii Corporation's Amended and Restated Change-In-Control Retention Plan, (incorporated by reference from Exhibit 10.1 to Bank of Hawaii Corporation's Current Report on Form 8-K, as filed on December 18, 2009).*
10.12 Amendment 2010-1 to the Bank of Hawaii Corporation Executive Incentive Plan (incorporated by reference from Exhibit 10.1 to the Bank of Hawaii Corporation's Current Report on Form 8-K, as filed on July 26, 2010).*
10.13 Bank of Hawaii Corporation’s 2004 Stock and Incentive Compensation Plan -Share Appreciation Replacement Program - 2011 Nonqualified Stock Option Agreement (incorporated by reference from Bank of Hawaii Corporation's Current Report on Form 8-K, as filed on November 22, 2011).*
10.14 Bank of Hawaii Corporation’s 2004 Stock and Incentive Compensation Plan - Form of 2012 Restricted Stock In Lieu Of Base Salary Grant Agreement (incorporated by reference from Exhibit 10.3 to Bank of Hawaii Corporation's Current Report on Form 8-K, as filed on January 23, 2012).* (incorporated by reference from Exhibit 10.4 to Bank of Hawaii Corporation's Current Report on Form 8-K, as filed on January 23, 2012).*
10.16 Bank of Hawaii Corporation’s 2004 Stock and Incentive Compensation Plan - Form of 2014 Restricted Stock Grant Agreement - Ho, Biggs \& Sellers (incorporated by reference from Exhibit 10.1 to Bank of Hawaii Corporation’s Current Report on Form 8-K, as filed on January 29, 2014).*
10.17 Bank of Hawaii Corporation’s 2004 Stock and Incentive Compensation Plan - Form of 2014 Restricted Stock Grant Agreement - Lucien \& Rossi (incorporated by reference from Exhibit 10.2 to Bank of Hawaii Corporation’s Current Report on Form 8-K, as filed on January 29, 2014).*
10.18 Bank of Hawaii Corporation's 2004 Stock and Incentive Compensation Plan - Form of 2014 Restricted Stock Unit Grant Agreement - Ho, Biggs \& Sellers (incorporated by reference from Exhibit 10.3 to Bank of Hawaii Corporation’s Current Report on Form 8-K, as filed on January 29, 2014).*
10.19 Bank of Hawaii Corporation’s 2004 Stock and Incentive Compensation Plan - Form of 2014 Restricted Stock Unit Grant Agreement - Lucien \& Rossi (incorporated by reference from Exhibit 10.4 to Bank of Hawaii Corporation's Current Report on Form 8-K, as filed on January 29, 2014).*
10.20 Bank of Hawaii Corporation’s 2004 Stock and Incentive Compensation Plan - Form of Special Incentive Agreement - Rossi \& Sellers (incorporated by reference from Exhibit 10.5 to Bank of Hawaii Corporation’s Current Report on Form 8-K, as filed on January 29, 2014).*
Bank of Hawaii Corporation's 2014 Stock and Incentive Plan (incorporated by reference from Appendix A to Bank of Hawaii Corporation’s Definitive Proxy Statement on Schedule 14A for the 2014 Annual Meeting of Shareholders, as filed on March 14, 2014).*
10.22 Bank of Hawaii Corporation’s 2014 Stock and Incentive Plan - Form of 2015 Restricted Stock Grant Agreement - (incorporated by reference from Exhibit 10.1 to Bank of Hawaii Corporation's Current Report on Form 8-K, as filed on January 28, 2015).*
10.23 Bank of Hawaii Corporation’s 2014 Stock and Incentive Plan - Form of 2015 Restricted Stock Unit Grant Agreement - (incorporated by reference from Exhibit 10.2 to Bank of Hawaii Corporation’s Current Report on Form 8-K, as filed on January 28, 2015).* k of Hawaii Corporation’s 2015 Director Stock Compensation Plan (incorporated by reference from Appendix A to Bank of Hawaii Corporation's Definitive Proxy Statement on Schedule 14A for the 2015 Annual Meeting of Shareholders filed on March 13, 2015).*
Bank of Hawaii Corporation’s 2014 Stock and Incentive Plan - Form of 2016 Restricted Stock Grant Agreement (incorporated by reference from Exhibit 10.30 to the Bank of Hawaii Corporation's Annual Report on Form 10-K, as filed on February 29, 2016).*
10.26 Bank of Hawaii Corporation’s 2014 Stock and Incentive Plan - Form of 2016 Restricted Stock Unit Grant Agreement (incorporated by reference from Exhibit 10.31 to the Bank of Hawaii Corporation's Annual Report on Form 10-K, as filed on February 29, 2016).*
Bank of Hawaii Corporation’s 2004 Stock and Incentive Compensation Plan - Amendment of 2011 Nonqualified Stock Option Agreement (incorporated by reference from Exhibit 10.1 to the Bank of Hawaii Corporation's Quarterly Report on Form 10-Q, as filed on July 25, 2016).*
Bank of Hawaii Corporation’s 2004 Stock and Incentive Compensation Plan - Amendment of 2012 Nonqualified Stock Option Agreement (incorporated by reference from Exhibit 10.2 to the Bank of Hawaii Corporation's Quarterly Report on Form 10-Q, as filed on July 25, 2016).*
10.29 Bank of Hawaii Corporation’s 2014 Stock and Incentive Plan - Form of 2017 Restricted Stock Grant Agreement (incor2222porated by reference from Exhibit 10.1 to the Bank of Hawaii corporation's Current Report on Form 8-K, as filed on February 27, 2017)*
10.30 Amendment to Bank of Hawaii Corporation’s 2014 Stock and Incentive Plan (incorporated by reference from Appendix A to Bank of Hawaii Corporation's Definitive Proxy Statement on Schedule 14A for the 2017 Annual Meeting of Shareholders, as filed on March 17, 2017).*
10.31 Bank of Hawaii Corporation’s 2014 Stock and Incentive Compensation Plan - Form of 2017 Restricted Stock Grant Agreement (incorporated by reference from Exhibit 10.1 to Bank of Hawaii Corporation’s Current Report on Form 8-K, as filed on February 27, 2017).*

Bank of Hawaii Corporation’s 2014 Stock and Incentive Compensation Plan - Form of 2018 Restricted Stock Grant Agreement (incorporated by reference from Exhibit 10.1 to Bank of Hawaii Corporation’s Current Report on Form 8-K, as filed on February 26, 2018).*
21.1 Subsidiaries of the Registrant.

Consent of Independent Registered Public Accounting Firm.
Certification on Chief Executive Officer Pursuant to Rule 13a-14(a) Under the Securities Exchange Act of 1934.
Certification of Chief Financial Officer Pursuant to Rule 13a-14(a) Under the Securities Exchange Act of 1934.
Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.

* Management contract or compensatory plan or arrangement.


## Signatures

Pursuant to the requirements of Section 13 or 15(d) 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.

Date: March 1, 2019

Bank of Hawaii Corporation

By: /s/ Peter S. Ho
Peter S. Ho
Chairman of the Board, Chief Executive Officer, and President

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.

Date: March 1, 2019


## Bank of Hawaii Corporation <br> Subsidiaries of the Registrant

The required information with respect to subsidiaries of Bank of Hawaii Corporation as of December 31, 2018 is provided below. All domestic subsidiaries are wholly-owned. Each entity is consolidated with its immediate parent company.

## BANK OF HAWAII CORPORATION (Parent) <br> Bank Holding Company - Delaware

## Subsidiaries:

BANK OF HAWAII

## Hawaii

Subsidiaries:
Bank of Hawaii Leasing, Inc. (Leasing) Hawaii

Bankoh Investment Services, Inc. (Brokerage) Hawaii
BOH Wholesale Insurance Agency, Inc. (Insurance) Hawaii
Pacific Century Insurance Services, Inc. (Captive Insurance) Hawaii

RGA Corp. (Real Property Holding Company) Hawaii

BOH Community Development Enterprise, Inc. (New Markets Tax Credit Investments) Hawaii
Pacific Century Life Insurance Corporation (Insurance) Arizona

## Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:
(1) Registration Statements on Form S-3 (Nos. 333-64248 and 333-165824) and on Form S-3 ASR (No. 333-207801) pertaining to the Bank of Hawaii Corporation Dividend Reinvestment and Stock Purchase Plan;
(2) Registration Statements on Form S-8 (Nos. 33-54777, 333-80127 and 333-61134) pertaining to the Pacific Century Financial Corporation Stock Option Plan of 1994 (formerly the Bancorp Hawaii, Inc. Stock Option Plan of 1994);
(3) Registration Statements on Form S-8 (Nos. 2-96329, 33-29872, 33-49836, 33-57267 and 333-165825) pertaining to the Bank of Hawaii Retirement Savings Plan (formerly the Pacific Century Financial Corporation Profit Sharing Plan);
(4) Registration Statement on Form S-8 (No. 333-203611) pertaining to the Bank of Hawaii Corporation 2015 Director Stock Compensation Plan (formerly the Pacific Century Financial Corporation Directors’ Stock Compensation Program);
(5) Registration Statements on Form S-8 (Nos. 333-115325, 333-143295 and 333-176463) pertaining to the Bank of Hawaii Corporation 2004 Stock and Incentive Compensation Plan; and
(6) Registration Statements on Form S-8 (Nos. 333-197674 and 333-217546) pertaining to the Bank of Hawaii Corporation 2014 Stock and Incentive Plan;
of our reports dated March 1, 2019, with respect to the consolidated financial statements of Bank of Hawaii Corporation and subsidiaries and the effectiveness of internal control over financial reporting of Bank of Hawaii Corporation and subsidiaries included in this Annual Report (Form 10-K) of Bank of Hawaii Corporation for the year ended December 31, 2018.
/s/ Ernst \& Young LLP

Honolulu, Hawaii
March 1, 2019

## Certification of Chief Executive Officer Pursuant to <br> Rule 13a-14(a) of the Securities Exchange Act of 1934, as Amended, Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Peter S. Ho, certify that:

1. I have reviewed this annual report on Form 10-K of Bank of Hawaii Corporation;
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 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit and risk committee of the registrant's board of directors:
(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: $\quad$ March 1, 2019
/s/ Peter S. Ho
Peter S. Ho
Chairman of the Board,
Chief Executive Officer, and
President

## Certification of Chief Financial Officer Pursuant to <br> Rule 13a-14(a) of the Securities Exchange Act of 1934, as Amended, Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Dean Y. Shigemura, certify that:

1. I have reviewed this annual report on Form 10-K of Bank of Hawaii Corporation;
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 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 and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit and risk committee of the registrant's board of directors:
(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.

## Certification of Chief Executive Officer and Chief Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

We hereby certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Annual Report on Form 10-K of Bank of Hawaii Corporation (the "Company") for the year ended December 31, 2018 (the "Report"):

- fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and
- the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

| /s/ Peter S. Ho |
| :--- |
| Peter S. Ho |
| Chairman of the Board, |
| Chief Executive Officer, and |
| President |
| /s/ Dean Y. Shigemura |
| Dean Y. Shigemura |
| Chief Financial Officer |

A signed original of this written statement required by Section 906 has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.


[^0]:     trust established pursuant to the Bank of Hawaii Corporation Director Deferred Compensation Plan (the "DDCP") directly from the Parent in satisfaction of the Company's obligations to
    
     not involve a public offering and occurred without general solicitation or advertising. The shares were purchased at the closing price of the Parent's common stock on the dates of purchase.
     depend on market and economic conditions, regulatory rules, applicable SEC rules, and various other factors.

[^1]:    The change in interest income and expense not solely due to changes in volume or rate has been allocated on a pro-rata basis to the volume and rate columns.
    2 Comprised of other consumer revolving credit, installment, and consumer lease financing.

[^2]:    ${ }^{1}$ Comprised of other revolving credit, installment, and lease financing.

[^3]:    ${ }^{1}$ Comprised of other revolving credit, installment, and lease financing.

[^4]:    1 Our liability for UTBs as of December 31, 2018 was $\$ 5.5$ million. We were unable to reasonably estimate the period of cash settlement with the respective taxing authority. As a result, our liability for UTBs is not included in this disclosure.
    2 Amounts only include obligations related to the unfunded non-qualified pension plan and postretirement benefit plan.

[^5]:    The efficiency ratio is defined as noninterest expense divided by total revenue (net interest income and noninterest income)
    2 The net interest margin is defined as net interest income, on a taxable-equivalent basis, as a percentage of average earning assets.

[^6]:    Comprised of other revolving credit, installment, and lease financing.

[^7]:    ${ }^{1}$ Comprised of other revolving credit, installment, and lease financing.

[^8]:    1 The period end balances reflect all partial paydowns and charge-offs since the modification date. TDRs fully paid off, charged off, or foreclosed upon by period end are not included.

[^9]:    1 The amount relates to the amortization/accretion of unrealized gains and losses related to the Company's reclassification of available-for-sale investment securities to the held-to-maturity category. The unrealized net gains/losses will be amortized/accreted over the remaining life of the investment securities as an adjustment of yield.

[^10]:    ${ }^{1}$ Represents reclassification adjustments from accumulated other comprehensive income during the period.

[^11]:    The fair value of each class of derivatives is shown in Note 17 Derivative Financial Instruments.

