REPUBLIC BANK

2019 ANNUAL REPORT

THE POWER OF RED IS BACK

CHAIRMAN'S LETTER

Dear Shareholders, Customers, Investors,
Team Members and Friends,

2019 marked another exceptional year in balance sheet growth for **"The Power of Red is Back"** expansion campaign. We celebrated the opening of four new stores to great fanfare, including our first two locations in New York City. As we continue to enter new markets, we remain laser-focused on turning customers into **FANS.**

We accomplish this by staying true to our customer-centric philosophy that embraces:

- Delivering the best banking experience across every delivery channel, in-store, online and via mobile
- Hiring local bankers serving local customers
- Killing stupid bank rules

As a result of our unique growth model, the past 12 months saw:

- Assets increase 21% to $3.3 billion
- Loans rise 22% to $1.7 billion
- Deposits increase 25% to $3 billion

Equally important, the ratio of non-performing assets continued to decline. While profitability remains challenged due to compression in our net interest margin, we are taking necessary steps to reduce expenses and improve earnings.

Led by the success of our all-glass prototype store, we have achieved:

- Deposit growth for new stores at an average rate of $30 million per year
- Deposit growth for all stores at an average rate of $22 million per year
- Loan growth in excess of 20% for three consecutive years

We remained a leader in small business lending, with more than $55 million in new SBA loans originated over the last year. For six years in a row, we have been ranked as one of the top small business lenders in the tri-state area. We've also hired a lending team for New York City, focusing on talent with deep ties and relationships throughout the city. We're excited to continue positioning Republic Bank as the preferred lender for small businesses.

The hiring of Jack Allison, a banking technology veteran with more 30 years of experience, as our Chief Technology Officer was an important step in our steadfast commitment to enhancing the customer experience across every delivery channel.

Our momentum is strong as customers gravitate to our unique, value-added, differentiated business model. "The Power of Red is Back."

THE BEST IS YET TO COME.

Vernon W. Hill, II

Vernon W. Hill, II,
Chairman, Republic First Bancorp

REPUBLIC FIRST BANCORP, INC. FINANCIAL HIGHLIGHTS

($ in millions, except per share data)

	2019	% Change vs 2018	3 YEAR AVERAGE GROWTH RATE	2018	2017	2016	2015
ASSETS	**$3,341**	+21%	+20%	$2,753	$2,322	$1,924	$1,439
LOANS	**1,748**	+22%	+22%	1,437	1,162	965	875
DEPOSITS	**2,999**	+25%	+21%	2,393	2,063	1,678	1,249
NET INCOME *(before Tax)*	**(4.9)**	-148%	-18%	10.2	6.0	4.8	2.4
NET INCOME PER SHARE	**$ (0.06)**	-140%	-38%	$ 0.15	$ 0.15	$ 0.12	$0.06

CHIEF EXECUTIVE OFFICER'S LETTER

I am pleased to present the 2019 Annual Report of Republic First Bancorp, Inc. (NASDAQ: FRBK) which recaps our financial progress, continued market expansion and purposeful community engagement. We remain steady in executing upon our "Power of Red is Back" controlled growth plan, which aims to provide customers with a one-of-a-kind, omnichannel banking experience unmatched by our competition.

Assets, loans and deposits continue to increase at rates that far surpass other financial institutions. Importantly, these increases are completely organic – we are growing without acquisitions. After several years of improvement in profitability, earnings in 2019 were impacted by the shape of the yield curve, in addition to the costs incurred to initiate our expansion into New York City. As we enter 2020, a number of cost control measures have been implemented to offset the challenges faced in growing revenue as a result of compression in the net interest margin.

As national and regional banks downsize their inflated branch networks, we are strategically building new stores in highly trafficked areas with identified customer demand. In addition to our entrance into the New York City market, we are also focusing on growing our presence in critical parts of Pennsylvania and New Jersey. Customers are eager to open accounts at these new stores as they recall Vernon Hill's best in class service model that we're replicating today at Republic Bank.

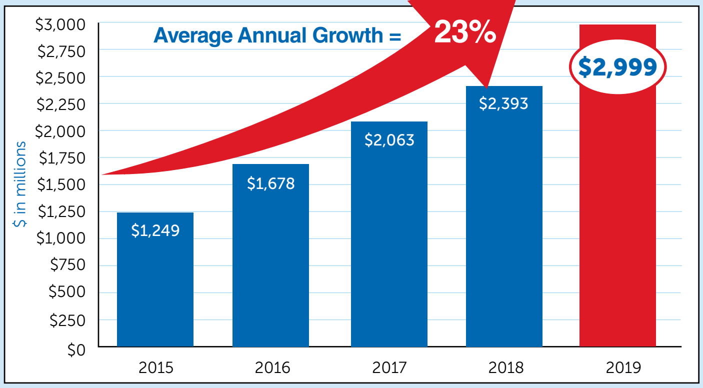
Oak Mortgage, our residential mortgage division, is serving the home financing needs of customers throughout our footprint, perfectly complementing the suite of traditional banking services we offer. Oak Mortgage originated more than $450 million in mortgage loans over the last 12 months, making 2019 its strongest year to date.

As a bank dedicated to the communities we serve, we continue to take great pride in supporting the local populations, organizations and initiatives that matter most to our customers. In addition to the support we offer to a select nonprofit at each store opening, this year, we renewed our focus on improving youth financial literacy. We hosted dozens of our proprietary Money Zone sessions at elementary schools across the region, teaching students the importance of saving and budgeting.

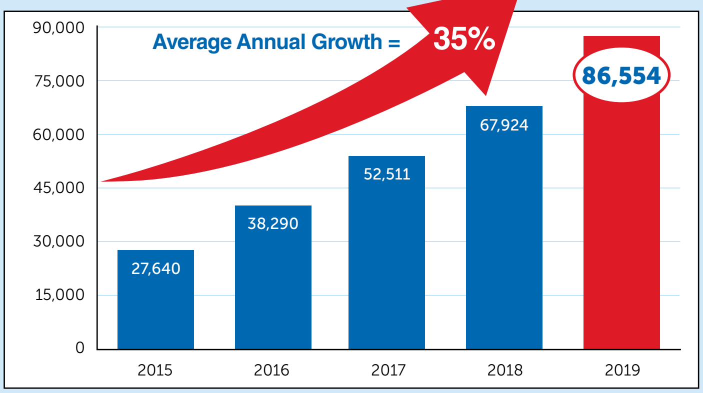
On behalf of the Board of Directors and our Executive Team, thank you for your unwavering support of our model and mission. We look forward to a successful 2020 together.

Harry D. Madonna
CEO, Republic First Bancorp

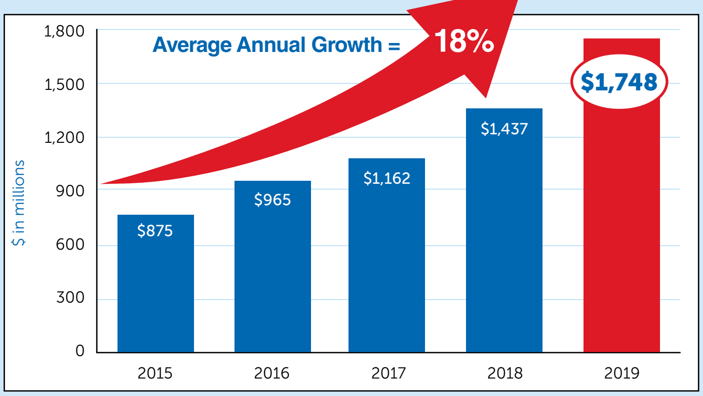
TOTAL DEPOSITS



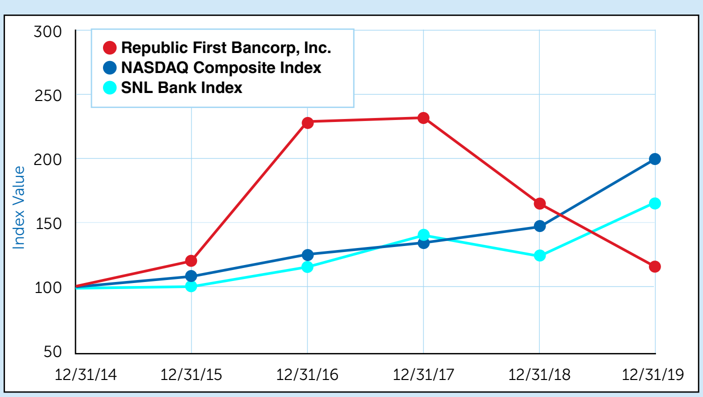
DEPOSIT ACCOUNTS



TOTAL LOANS



TOTAL RETURN PERFORMANCE



STORE OPENINGS

Our aggressive growth plan, **"The Power of Red is Back,"** gained momentum in 2019 as we opened four new stores. We entered the Lumberton, NJ community in March, which marked our fifth location in Burlington County, and opened a store in Feasterville, PA in May as we continued our expansion into Bucks County. In the second half of the year, we officially established our presence New York City by cutting the ribbon at two locations in Manhattan. We remain committed to strategically growing our store network while providing customers with unparalleled levels of service and convenience.

Feasterville, PA Grand Opening

51st St.& 3rd Ave., NYC Grand Opening

STORE LOCATIONS

PERSONAL BANKING

We're not like other banks – building personal relationships with our customers is deeply ingrained in our culture, and our **"Fans Not Customers"** model is at the heart of all we do. Our goal is to make banking as easy and as convenient as possible to effectively meet our customers' needs. Whether it is in-store, online or via mobile, we strive to exceed our customers' expectations at every step of the way.

- **Open 7 Days**
  early & late, 361 days a year
- **Absolutely FREE Personal Checking**
- **Residential Mortgages**
- **FREE Coin Counting**
  for everyone[1]
- **ATM/Debit Card**
  on the spot
- **Fee FREE ATMs**[2]
  over 55,000 Allpoint® ATMs worldwide
- **Bank Anywhere**
  in-store, online, phone or mobile[3]

[1] Some limitations or restrictions may apply for businesses.
[2] For Republic Bank customers. [3] Text and data charges may apply.

COMMUNITY SERVICE

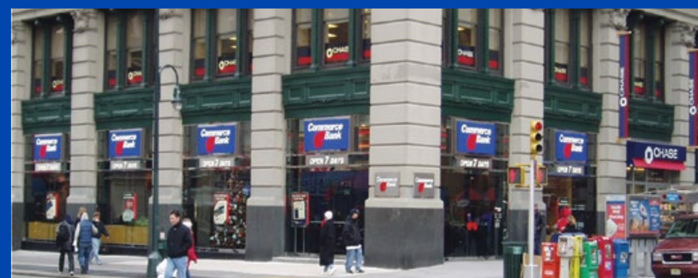
As a bank dedicated to the communities we serve, we take pride in championing the local organizations and initiatives that matter most to our customers. That's why at each store opening we make a donation to an area non-profit in support of their mission. This year, that included the *Feasterville Fire Company, Lumberton Township Emergency Squad* and the *Intrepid Fallen Heroes Fund.* We also give back to the philanthropic organizations that align with our core values, including *Girls on the Run,* the *YMCA* and *CONTACT of Burlington County*, among others.

Lumberton Township Emergency Squad

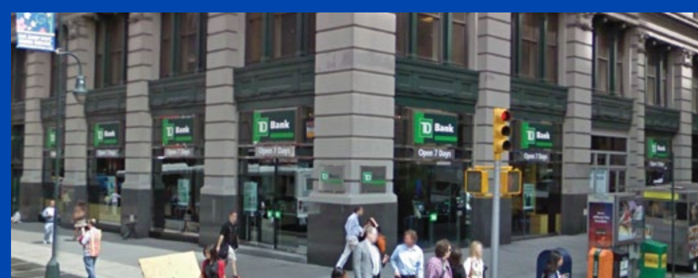
THE POWER OF RED RETURNS TO NEW YORK

2019 marked the important return of **"The Power of Red"** to New York City as we brought back the legendary banking experience that New Yorkers have been missing. We opened two new locations in Manhattan – one at 14^{th} Street and 5^{th} Avenue, where a highly trafficked Commerce Bank once stood, and a second store at 51^{st} Street and 3^{rd} Avenue. Additional stores are set to open in 2020 and beyond.

In 2003, when Chase Bank moves into the space upstairs, Commerce Bank takes over the corner of 14^{th} St. & 5^{th} Ave.



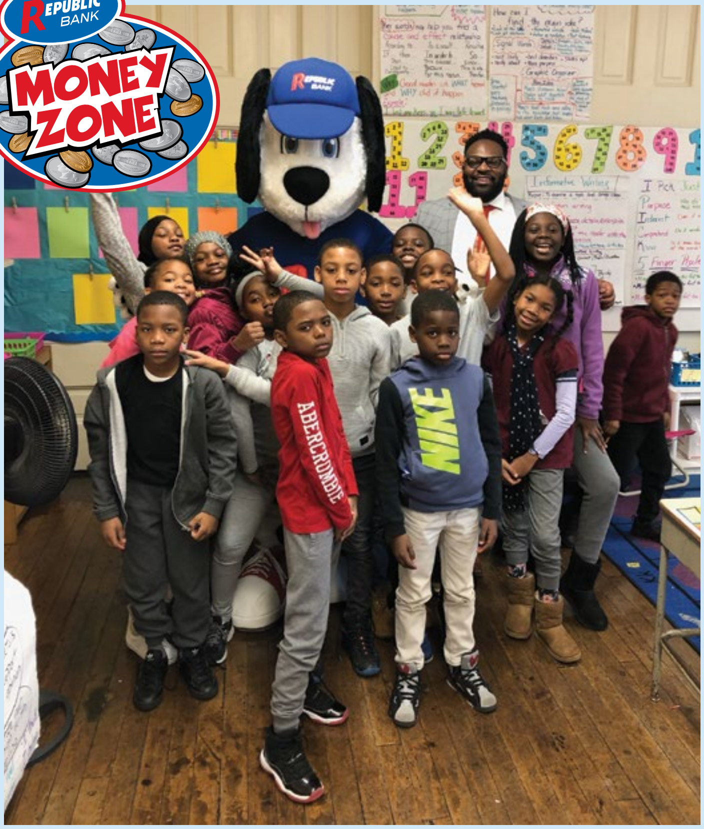
In 2008, TD Bank acquires Commerce Bank, and ultimately downsizes to the smaller space next door.



On July 12, 2019 the **Power of Red** returns to the corner of 14^{th} St. & 5^{th} Ave.

SURPRISE AND DELIGHT

As part of our ongoing Surprise and Delight Series, we hosted several pop-up events throughout Philadelphia. Outside our flagship store at 16th & Market Streets, we handed out free treats from local favorites such as *Franklin Fountain, Federal Donuts* and *Philadelphia Water Ice.* We also partnered with renowned art school *Studio Incamminati* to host a workshop at *Roman Catholic High School* where students drew a live subject – R Dog! The series aims to give back to our community and connect groups of people in unexpected ways.



MONEY ZONE

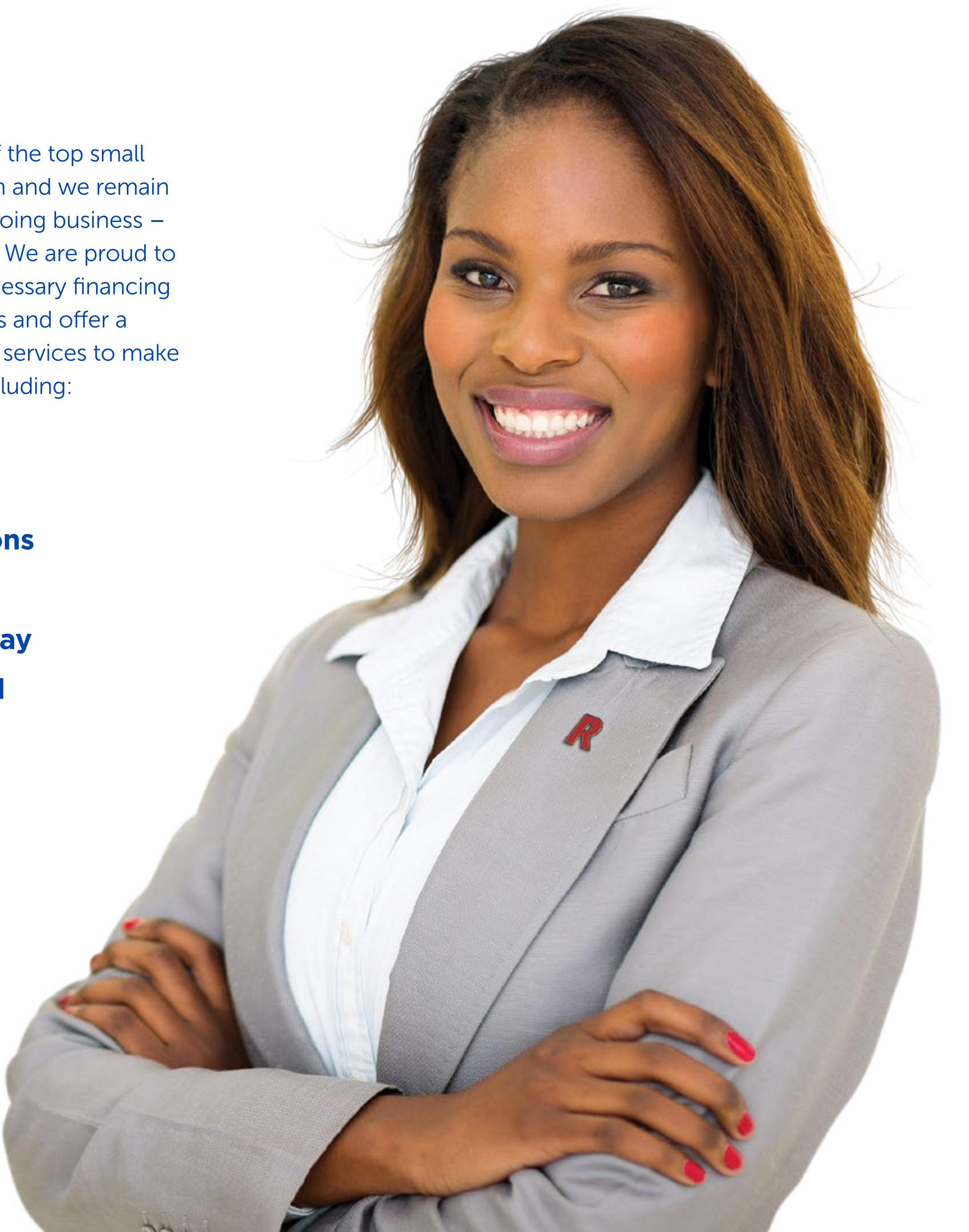
For more than five years, we have pioneered Money Zone, a one-of-a-kind interactive instructional program designed to introduce elementary school students to the fundamentals of making deposits and withdrawals, saving and earning money and creating a budget. We conducted more than 500 Money Zone classes throughout Pennsylvania and New Jersey in 2019 and look forward to bringing this proprietary program to New York in 2020.

BUSINESS BANKING

Republic Bank continues to be one of the top small business lenders in the tri-state region and we remain steadfast in our unique approach to doing business – delivering funding quickly and locally. We are proud to provide business owners with the necessary financing to establish and grow their companies and offer a comprehensive suite of products and services to make business banking simple and easy, including:

- **Absolutely FREE Business Checking***
- **Cash Management Solutions**
- **Loans and Lines of Credit**
- **Online Banking with Bill Pay**
- **Business Visa® Credit Card**
- **Small Business Lending**
- **Commercial Real Estate**

*Up to 600 checks/deposited items monthly for this account.



THE ENTREPRENEUR'S BANK

For the sixth year in a row, we demonstrated our support of small businesses by honoring two of our valued customers on their busiest shopping day of the year – *Small Business Saturday.* We brought employees, a festive street team and R Dog to Haddonfield, NJ to honor local mainstays *Running Co. of Haddonfield* and *Sweet T's Bakeshop* by handing out $10 gift cards to incentivize purchases.

SMALL BUSINESS SATURDAY®

SHOP SMALL

EXECUTIVE MANAGEMENT

Harry D. Madonna
Chief Executive Officer

Andrew J. Logue
President
Chief Operating Officer

Frank Cavallaro
Executive Vice President
Chief Financial Officer

Jay Neilon
Executive Vice President
Chief Credit Officer

Tracie Young
Executive Vice President
Chief Risk Officer

SENIOR OFFICERS

Sharon Hammel
Senior Vice President
Chief Retail Officer

Steve McWilliams
Senior Vice President
Director of Commercial
& Industrial Lending

Joseph Tredinnick
Senior Vice President
Market President, PA & NJ

Jack Allison
Senior Vice President
Chief Information Officer

BOARD OF DIRECTORS

Vernon W. Hill, II
Chairman, Republic First Bancorp

Harry D. Madonna

Andrew B. Cohen

Theodore J. Flocco, Jr., CPA

Lisa R. Jacobs, Esquire

Barry L. Spevak

Brian P. Tierney, Esquire

Harris Wildstein, Esquire

UNITED STATES
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 for the fiscal year ended December 31, 2019.
or
[ ] Transition Report Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 for the transition period from ___ to ___.

Commission File Number: **000-17007**

REPUBLIC FIRST BANCORP, INC.
(Exact name of registrant as specified in its charter)

Pennsylvania	**23-2486815**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
50 South 16th Street, Philadelphia, Pennsylvania	**19102**
(Address of principal executive offices)	(Zip code)

Registrant's telephone number, including area code 215-735-4422

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	FRBK	Nasdaq Global Market

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. **YES [ ] NO [X]**

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. **YES [ ] NO [X]**

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months. **YES [X] NO [ ]**

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

Large accelerated filer [ ]	Accelerated filer **[X]**
Non-Accelerated filer [ ]	Smaller reporting company [ ]
Emerging growth company [ ]	

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). **YES [ ] NO [X]**

The aggregate market value of the voting and non-voting common equity held by non-affiliates was $257,259,804 based on the last sale price on Nasdaq Global Market on June 30, 2019.

Indicate the number of shares outstanding of each of the registrant's classes of common stock, as of the latest practicable date.

Common Stock, par value $0.01 per share	**58,850,778**
Title of Class	Number of Shares Outstanding as of March 13, 2020

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's Definitive Proxy Statement for its 2020 Annual Meeting of Shareholders, which Definitive Proxy Statement will be filed with the Securities and Exchange Commission not later than 120 days after the registrant's fiscal year ended December 31, 2019, are incorporated by reference into Part III of this Form 10-K; provided, however, that the Compensation Committee Report, the Audit Committee Report and any other information in such proxy statement that is not required to be included in this Annual Report on Form 10-K, shall not be deemed to be incorporated herein by reference or filed as a part of this Annual Report on Form 10-K.

REPUBLIC FIRST BANCORP, INC. AND SUBSIDIARY
TABLE OF CONTENTS

PART I

Item 1: Business

Throughout this Annual Report on Form 10-K, the registrant, Republic First Bancorp, Inc., is referred to as the "Company" or as "we," "our" or "us". The Company's website address is www.myrepublicbank.com. The information on this website is not and should not be considered part of this Form 10-K and is not incorporated by reference in this Form 10-K. This website is, and is only intended to be, for reference purposes only. The Company makes available free of charge on or through its website its Annual Report on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") as soon as reasonably practicable after the Company electronically files such material with, or furnishes it to, the Securities and Exchange Commission (the "SEC").

Forward Looking Statements

This document contains "forward-looking statements," as that term is defined in the U.S. Private Securities Litigation Reform Act of 1995. These statements can be identified by reference to a future period or periods or by the use of words such as "would be," "could be," "should be," "probability," "risk," "target," "objective," "may," "will," "estimate," "project," "believe," "intend," "anticipate," "plan," "seek," "expect" and similar expressions or variations on such expressions. These forward-looking statements include, among others: statements of goals, intentions and expectations, statements regarding the impact of accounting pronouncements, statements regarding prospects and business strategy, statements regarding allowance for loan losses, asset quality and market risk and estimates of future costs, benefits and results.

Forward-looking statements are subject to certain risks and uncertainties that could cause actual results to differ materially from those projected in the forward-looking statements. For example, and in addition to the "Risk Factors" discussed elsewhere in this Form 10-K, risks and uncertainties can arise with changes in or related to:

- general economic conditions, including turmoil in the financial markets and related efforts of government agencies to stabilize the financial system;
- the adequacy of our allowance for loan losses and our methodology for determining such allowance;
- adverse changes in our loan portfolio and credit risk-related losses and expenses;
- concentrations within our loan portfolio, including our exposure to commercial real estate loans, and to our primary service area;
- changes in interest rates;
- business conditions in the financial services industry, including competitive pressure among financial services companies, new service and product offerings by competitors, price pressures and similar items;
- deposit flows;
- loan demand;

- the regulatory environment, including evolving banking industry standards and changes in legislation or regulation;

- our securities portfolio and the valuation of our securities;

- accounting principles, policies and guidelines as well as estimates and assumptions used in the preparation of our financial statements;

- rapidly changing technology;

- health emergencies, including the spread of infectious diseases or pandemics;

- litigation liabilities, including costs, expenses, settlements and judgments; and

- other economic, competitive, governmental, regulatory and technological factors affecting our operations, pricing, products and services.

Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect management's beliefs only as of the date hereof. Except as required by applicable law or regulation, we do not undertake, and specifically disclaim any obligation, to update or revise any forward-looking statements to reflect any changed assumptions, any unanticipated events or any changes in the future. Significant factors which could have an adverse effect on the operations and future prospects of the Company are detailed in the "Risk Factors" section included under Item 1A of Part I of this Annual Report on Form 10-K. Readers should carefully review the risk factors included in this Annual Report on Form 10-K and in other documents the Company files from time to time with the SEC.

General

Republic First Bancorp, Inc. was organized and incorporated under the laws of the Commonwealth of Pennsylvania in 1987 and is the holding company for Republic First Bank, which does business under the name Republic Bank, and we may refer to as Republic or the Bank throughout this document. Republic offers a variety of credit and depository banking services. Such services are offered to individuals and businesses primarily in the Greater Philadelphia, Southern New Jersey, and the New York City area through offices and branches in Philadelphia, Bucks, Delaware, and Montgomery Counties in Pennsylvania, Atlantic, Burlington, Camden, and Gloucester Counties in New Jersey, and New York County in New York.

Historically, our primary objective had been to position ourselves as an alternative to the large financial institutions for commercial banking services in the Greater Philadelphia and Southern New Jersey region. However, in 2008, we made an important and strategic shift in our business approach, redirecting our efforts toward the creation of a major retail bank that would meet an important need in our existing marketplace. Focused on delivering high levels of customer service and satisfaction, driving innovation, developing a bold brand and creating shareholder value, Republic Bank sought to offer a banking experience that would turn customers into Fans. As other banks began to turn toward automation for growth, Republic Bank took a different approach and chose not only to embrace advances in technology, but to also define itself by the personal touch.

To achieve such a transformation, we recruited several key banking executives who had previously served in leadership roles at Commerce Bank, upon which this business model draws inspiration. With a strong management team in place, along with adequate capital resources to support this revitalized vision, we began to build a unique brand with the goal of establishing ourselves as a premier financial institution in the Philadelphia metropolitan area.

An important part of that strategic shift toward creating a retail and customer focused bank was the decision in 2010 to rebrand our stores from Republic First Bank to Republic Bank, which had been the name under which we had initially incorporated and operated from 1988-1996. In support of that rebrand, we also renovated and remodeled the majority of our existing branches which refer to and operate as stores. Further, we embraced critical service changes that reframed the Republic Bank brand and experience in the eyes of the consumer to include expanded hours, absolutely free checking, free coin counting, no ATM surcharges, mobile banking and much more.

From a lending perspective, we also shifted away from our historic approach, which was primarily focused on business banking and isolated commercial lending transactions, in particular commercial real estate loans. While restructuring our loan portfolio and deemphasizing the origination of commercial real estate loans, we also undertook a detailed review of our more significant credit relationships. This review allowed us to reduce exposure, enhance our allowance for loan loss methodology and commit to originate fewer commercial real estate loans in an effort to reduce our credit concentrations in that particular category.

In December 2011, we completed the sale of several distressed commercial real estate loans and foreclosed properties to a single investor. This transaction dramatically reduced our non-performing asset balances and significantly improved our credit quality metrics. This loan sale was a cornerstone transaction in the transformation of Republic Bank.

With these significant changes implemented, Republic Bank was then well-positioned to execute an aggressive expansion plan which was given the title, "**The Power of Red is Back**." To support this growth strategy, we completed the sale of $45 million of common stock through a private placement offering in April 2014 which provided the necessary capital to begin our aggressive expansion plan.

During 2016, we expanded our product offerings through the addition of a residential mortgage lending team. We acquired Oak Mortgage Company in July 2016 which has been fully integrated and became a division of the Bank. Oak Mortgage is headquartered in Marlton, NJ and is licensed to do business in Pennsylvania, Delaware, New Jersey, and Florida providing our customers with opportunities in the residential lending market. The Oak Mortgage team has been a tremendous fit for Republic's commitment to extraordinary customer service and has proven to be a perfect complement to the Bank's network of store locations.

To strengthen our capital position and prepare for the next stage of growth and expansion, we completed a capital raise in the amount of $100 million through a registered direct offering of our common stock in December 2016. At the same time, Vernon W. Hill, II became a member of the Board of Directors and was appointed Chairman of Republic First Bancorp, Inc. He has been a major investor and consultant to Republic since 2008. Mr. Hill is often credited with reinventing the concept of Retail Banking. He was the Founder and Chairman of Commerce Bancorp, a $50 billion Retail Bank headquartered in metro Philadelphia, which grew to 450 locations along the east coast before its sale in 2007.

The aggressive expansion plan has produced strong results from a balance sheet perspective and continues to build momentum. Over the last six years, we have opened eighteen new stores using our signature glass building. During 2019, we expanded our store network in the Southern New Jersey area by opening a new location in Lumberton and expanded in the Greater Philadelphia area with a new store in Feasterville, PA. During 2019, we also expanded into the New York market with the grand opening of two stores located at 14^{th} Street & 5^{th} Avenue and 51^{st} Street & 3^{rd} Avenue in Manhattan.

As of December 31, 2019, we had total assets of approximately $3.3 billion, total shareholders' equity of approximately $249.2 million, total deposits of approximately $3.0 billion, net loans receivable of approximately $1.7 billion, and a net loss of $3.5 million for the year ended December 31, 2019. We have one reportable segment: community banking. The community bank segment primarily encompasses the commercial loan and deposit activities of Republic, as well as residential mortgage and other consumer loan products in the area surrounding its stores. We provide banking services through the Bank, and do not presently engage in any activities other than traditional banking activities.

Republic Bank

Republic First Bank is a commercial bank chartered pursuant to the laws of the Commonwealth of Pennsylvania, and is subject to examination and comprehensive regulation by the Federal Deposit Insurance Corporation (FDIC) and the Pennsylvania Department of Banking and Securities. Republic First Bank is a subsidiary of Republic First Bancorp, Inc. Republic First Bank does business under the name of Republic Bank. The deposits held by the Bank are insured, up to applicable limits, by the Deposit Insurance Fund of the FDIC.

Service Area / Market Overview

Our primary service area currently consists of Greater Philadelphia, Southern New Jersey, and New York City. We presently conduct our principal banking activities through twenty-nine branch locations which are commonly referred to as "stores" throughout this document to reflect our retail oriented approach to customer service and convenience. Twelve of these stores are located in Philadelphia and the surrounding suburbs of Plymouth Meeting, Wynnewood, Abington, Media, Fairless Hills, and Feasterville in Pennsylvania. There are fifteen stores located in the Southern New Jersey market in Haddonfield, Voorhees, Glassboro, Marlton, Berlin, Washington Township, Moorestown, Sicklerville, Medford, Cherry Hill, Gloucester Township, Evesboro, Somers Point, and Lumberton. There are two stores located in New York City at 14th Street & 5th Avenue and 51st Street & 3rd Avenue. Our commercial lending activities extend beyond our primary service area, to include other counties in Pennsylvania, New Jersey, and New York as well as parts of Delaware, Maryland, and other out-of-market opportunities. Our residential lending activities also extend outside of our primary service area, to include other counties in Pennsylvania, New Jersey, and New York, as well as Delaware and Florida through our Oak Mortgage lending team.

Competition

We face substantial competition from other financial institutions in our service area. Competitors include Wells Fargo, BB&T, Citizens, PNC, Santander, TD Bank, and Bank of America, as well as many regional and local community banks. In addition, we compete directly with savings banks, savings and loan associations, finance companies, credit unions, mortgage brokers, insurance companies, securities brokerage firms, mutual funds, money market funds, private lenders and other institutions for deposits, commercial loans, mortgages and consumer loans, as well as other services. Competition among financial institutions is based upon a number of factors, including the quality of services rendered, interest rates offered on deposit accounts, interest rates charged on loans and other credit services, service charges, the convenience of banking facilities, locations and hours of operation and, in the case of loans to larger commercial borrowers, applicable lending limits. Many of the financial institutions with which we compete have greater financial resources than we do, and offer a wider range of deposit and lending products.

Our legal lending limit to one borrower was approximately $38.2 million at December 31, 2019. Loans above this amount may be made if the excess over the lending limit is participated to other institutions. We are subject to potential intensified competition from new branches of established banks in the area as well as new banks that could open in our market area. There are banks and other financial institutions, which serve surrounding areas, and additional out-of-state financial institutions, which currently, or in the future, may compete in our market. We compete to attract deposits and loan applications both from customers of existing institutions and from customers new to our market and we anticipate a continued increase in competition in our service area.

We believe that an attractive niche exists serving small to medium sized business customers not adequately served by our larger competitors, and we will seek opportunities to build commercial relationships to complement our retail strategy. We believe small to medium-sized businesses will continue to respond in a positive manner to the attentive and highly personalized service we provide.

Products and Services

We offer a range of competitively priced banking products and services, including consumer and commercial deposit accounts, checking accounts, interest-bearing demand accounts, money market accounts, certificates of deposit, savings accounts, sweep accounts, lockbox services and individual retirement accounts and other traditional banking services, secured and unsecured commercial loans, real estate loans, construction and land development loans, automobile loans, home improvement loans, mortgages, home equity and overdraft lines of credit, and other products. We attempt to offer a high level of personalized service to both our retail and commercial customers.

We also maintain a Small Business Lending team that specializes in the origination of loans guaranteed by the U.S. Small Business Administration ("SBA") to provide much needed credit to small businesses throughout our service area. This team has consistently been one of the top lenders under the SBA program in our region. For the last several years they have been ranked as one of the top SBA lenders in the tri-state market of Pennsylvania, New Jersey and Delaware based on the dollar volume of loan originations.

We are members of the STAR™ and PLUS™ automated teller (ATM) networks, and Allpoint - America's Largest Surcharge Free ATM Network which enable us to provide our customers with free access to more than 55,000 ATMs worldwide. We currently have thirty-one proprietary ATMs located in our store network.

Our lending activities generally are focused on small and medium sized businesses within the communities that we serve. Commercial real estate loans represent the largest category within our loan portfolio, amounting to approximately 35% of total loans outstanding at December 31, 2019. Repayment of these loans is, in part, dependent on general economic conditions affecting our customers and various businesses within the community. As a commercial lender, we are subject to credit risk. Economic and financial conditions could have an adverse effect on the ability of our borrowers to repay their loans. To manage the challenges that the economic environment may present we have adopted a conservative loan classification system, continually review and enhance our allowance for loan loss methodology, and perform a comprehensive review of our loan portfolio on a regular basis.

With the addition of Oak Mortgage Company in 2016, we are now able to offer residential mortgage loan products to customers in Pennsylvania, New Jersey, New York, Delaware, and Florida. A majority of the residential loans originated are currently sold on the secondary market shortly after closing. Oak Mortgage follows the established underwriting policies and guidelines of third party vendors with whom loans are being sold to maintain compliance, but credit risk still exists in the portfolio. Repayment of residential loans held in the portfolio is, in part, dependent on general economic conditions affecting our customers.

Although management follows established underwriting policies and closely monitors loans through Republic's loan review officer, credit risk is still inherent in the portfolio. The majority of Republic's loan portfolio is collateralized with real estate or other collateral; however, a portion of the commercial portfolio is unsecured, representing loans made to borrowers considered to be of sufficient financial strength to merit unsecured financing. Republic makes both fixed and variable rate commercial loans with terms typically ranging from one to five years. Variable rate loans are generally tied to the national prime rate of interest.

Store Expansion Plans and Growth Strategy

During 2019, we opened new stores in Lumberton, New Jersey and Feasterville, Pennsylvania utilizing our distinctive glass prototype building. We also opened two stores in Manhattan at 14th Street & 5th Avenue and 51st Street & 3rd Avenue. The Bank anticipates the continuation of its expansion strategy in the Metro Philadelphia market and New York City in 2020. However, as previously announced, the pace of new store openings will be slowed as we deal with the challenging nature of the current interest rate environment which has resulted in compression of the net interest margin and a decline in earnings. Relocation of other existing store locations may also occur in the future as we continue to enhance our brand and focus on constantly improving the customer experience. The opening or relocation of any store is subject to regulatory approval.

The addition of Oak Mortgage in July 2016 provides us with new growth opportunities in the residential lending market. Oak Mortgage is licensed to do business in Pennsylvania, New Jersey, New York, Delaware, and Florida and gives us the ability to serve both new and existing customers throughout our store network. We envision the expansion of the Oak Mortgage lending team along with the growth of our store network.

Securities Portfolio

We maintain an investment securities portfolio. We purchase investment securities that are in compliance with our investment policies, which are approved annually by our Board of Directors. The investment policies address such issues as permissible investment categories, credit quality, maturities and concentrations. At December 31, 2019 and 2018, approximately 94% and 92%, respectively, of the aggregate dollar amount of the investment securities consisted of either U.S. government debt securities or U.S. government agency issued mortgage-backed securities. Credit risk associated with these U.S. government debt securities and the U.S. government agency securities is minimal, with risk-based capital weighting factors of 0% and 20%, respectively. The remainder of the securities portfolio consists of municipal securities, corporate bonds, asset-backed securities, and Federal Home Loan Bank (FHLB) capital stock.

Supervision and Regulation

General

Republic, as a Pennsylvania state chartered bank, is not a member of the Federal Reserve System ("Federal Reserve") and is subject to supervision and regulation by the FDIC and the Pennsylvania Department of Banking and Securities. Our bank holding company is subject to supervision and regulation by the Board of Governors of the Federal Reserve under the Federal Bank Holding Company Act of 1956, as amended ("BHC Act"). As a bank holding company, our activities and those of Republic are limited to the business of banking and activities closely related or incidental to banking, and we may not directly or indirectly acquire the ownership or control of more than 5% of any class of voting shares or substantially all of the assets of any company, including a bank, without the prior approval of the Federal Reserve.

We are subject to extensive requirements and restrictions under federal and state law, including requirements to maintain reserves against deposits, restrictions on the types and amounts of loans that may be granted and the interest that may be charged thereon, and limitations on the types of investments that may be made and the types of services that may be offered. Various federal and state consumer laws and regulations also affect the operations of Republic. In addition to the impact of regulation, commercial banks are affected significantly by the actions of the Federal Reserve attempting to control the money supply and credit availability in order to influence market interest rates and the national economy.

The following discussion summarizes certain banking laws and regulations that affect us and Republic.

Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010

The Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 (the "Dodd-Frank Act") has had a broad impact on the financial services industry, including significant regulatory and compliance changes including, among other things, (i) enhanced resolution authority of troubled and failing banks and their holding companies; (ii) increased capital and liquidity requirements; (iii) increased regulatory examination fees; (iv) changes to assessments to be paid to the FDIC for federal deposit insurance; and (v) numerous other provisions designed to improve supervision and oversight of, and strengthening safety and soundness for, the financial services sector. Additionally, the Dodd-Frank Act established a new framework for systemic risk oversight within the financial system to be distributed among new and existing federal regulatory agencies, including the Financial Stability Oversight Council, the Consumer Financial Protection Bureau, the Federal Reserve, the Office of the Comptroller of the Currency, and the FDIC. A summary of certain provisions of the Dodd-Frank Act is set forth below.

- *Increased Capital Standards and Enhanced Supervision*. The federal banking agencies established minimum leverage and risk-based capital requirements for banks and bank holding companies. These new standards are summarized under "Capital Adequacy" below. The Dodd-Frank Act also requires capital requirements to be countercyclical such that the required amount of capital increases in times of economic expansion and decreases in times of economic contraction consistent with safety and soundness.

- *The Consumer Financial Protection Bureau ("CFPB")*. The Dodd-Frank Act created the CFPB within the Federal Reserve. The CFPB is tasked with establishing and implementing rules and regulations under certain federal consumer protection laws with respect to the conduct of providers of certain consumer financial products and services. The CFPB has broad rulemaking, supervisory and enforcement powers for a wide range of consumer protection laws applicable to banks with greater than $10 billion or more in assets. Smaller institutions will be subject to rules promulgated by the CFPB, but will continue to be examined and supervised by federal banking regulators for consumer compliance purposes. In addition, the Dodd-Frank Act permits states to adopt consumer protection laws and regulations that are more stringent than those regulations promulgated by the CFPB and state attorneys general are permitted to enforce consumer protection rules adopted by the CFPB against state-chartered institutions.

- *Deposit Insurance.* The Dodd-Frank Act permanently increased the maximum deposit insurance amount to $250,000 for insured deposits. Amendments to the Federal Deposit Insurance Act, which were mandated by the Dodd-Frank Act, have revised the assessment base against which an insured depository institution's deposit insurance premiums paid to the Deposit Insurance Fund ("DIF") are calculated. Under the amendments, the assessment base is no longer the institution's deposit base, but rather its average consolidated total assets less its average tangible equity during the assessment period. Additionally, the Dodd-Frank Act made changes to the minimum designated reserve ratio of the DIF, by increasing the minimum from 1.15 percent to 1.35 percent of the estimated amount of total insured deposits by 2020 and eliminating the requirement that the FDIC pay dividends to depository institutions when the reserve ratio exceeds certain thresholds. The Dodd- Frank Act also provided that, effective July 21, 2011, depository institutions may pay interest on demand deposits. For further discussion of deposit insurance regulatory matters, see "Deposit Insurance and Assessments" below.

- *Transactions with Affiliates*. Under federal law, we are subject to restrictions that limit certain types of transactions between Republic and its non-bank affiliates. In general, we are subject to quantitative and qualitative limits on extensions of credit, purchases of assets and certain other transactions involving us and our non-bank affiliates. Transactions between Republic and its non-bank affiliates are required to be on arms length terms. The Dodd-Frank Act enhanced the requirements for certain transactions with affiliates under Section 23A and 23B of the Federal Reserve Act, including expanding the definition of "covered transactions" and "affiliates," as well as increasing the amount of time for which collateral requirements regarding covered transactions must be maintained.

- *Transactions with Insiders*. Under the Dodd-Frank Act, insider transaction limitations are expanded through the strengthening of loan restrictions to insiders and the expansion of the types of transactions subject to the various limits, including derivative transactions, repurchase agreements, reverse repurchase agreements and securities lending or borrowing transactions. Restrictions have also been placed on certain asset sales to and from an insider to an institution, including requirements that such sales be on market terms and, if representing more than 10% of capital, approved by the institution's board of directors.

- *Holding Company Capital Levels*. The Dodd-Frank Act requires bank regulators to establish minimum capital levels for holding companies that are at least as stringent as those applicable to depository institutions. All trust preferred securities, or TRUPs, issued prior to May 19, 2010 by bank holding companies with less than $15 billion in assets are permanently grandfathered in Tier 1 capital, subject to limitation of 25% of Tier 1 capital.

Gramm-Leach-Bliley Act

The federal Gramm-Leach-Bliley Act (the "GLB Act"), enacted in 1999, repealed the key provisions of the Glass Steagall Act so as to permit commercial banks to affiliate with investment banks (securities firms). It also amended the BHC Act to permit qualifying bank holding companies to engage in many types of financial activities that were not permitted for banks themselves and permitted subsidiaries of banks to engage in a broad range of financial activities that were not permitted for themselves.

The result was to permit banking companies to offer a wider range of financial products and services to combine with other types of financial companies, such as securities and insurance companies. The impact of the GLB Act has, however, now been substantially limited by the Dodd-Frank Act and regulations issued by the Federal Reserve thereunder, specifically the so-called "Volcker Rule," which will limit the ability of certain banks and their affiliates to invest in, or to engage in, non-banking activities for their own account.

The GLB Act created a new type of bank holding company called a "financial holding company" ("FHC"). An FHC is authorized to engage in any activity that is "financial in nature or incidental to financial activities" and any activity that the Federal Reserve determines is "complementary to financial activities" and does not pose undue risks to the financial system. Among other things, "financial in nature" activities include securities underwriting and dealing, insurance underwriting and sales, and certain merchant banking activities. A bank holding company qualifies to become an FHC if each of its depository institution subsidiaries is "well capitalized," "well managed," and has a rating under the Community Reinvestment Act ("CRA") of "satisfactory" or better. A qualifying bank holding company becomes an FHC by filing with the Federal Reserve an election to become an FHC. We have not elected to become an FHC. Bank holding companies that do not qualify or elect to become FHCs will be limited in their activities to those previously permitted by law and regulation.

In addition, the GLB Act provided significant new protections for the privacy of customer information. These provisions apply to any company the business of which is engaging in activities permitted for an FHC, even if it is not itself an FHC. The GLB Act subjected a financial institution to four new requirements regarding non-public information about a customer. The financial institution must: adopt and disclose a privacy policy; give customers the right to "opt out" of disclosures to non-affiliated parties; not disclose any information to third party marketers; and follow regulatory standards to protect the security and confidentiality of customer information.

Sarbanes-Oxley Act of 2002

The Sarbanes-Oxley Act of 2002 ("Sarbanes-Oxley") comprehensively revised the laws affecting corporate governance, auditing and accounting, executive compensation and corporate reporting for entities, such as us, with equity or debt securities registered under the Exchange Act. Among other things, Sarbanes-Oxley and its implementing regulations have established new membership requirements and additional responsibilities for our audit committee, imposed restrictions on the relationship between us and our outside auditors (including restrictions on the types of non-audit services our auditors may provide to us), imposed additional responsibilities for our external financial statements on our chief executive officer and chief financial officer, and expanded the disclosure requirements for our corporate insiders. The requirements are intended to allow shareholders to more easily and efficiently monitor the performance of companies and directors.

Regulatory Restrictions on Dividends

Dividend payments by Republic to the holding company are subject to the Pennsylvania Banking Code of 1965 ("Banking Code") and the Federal Deposit Insurance Act ("FDIA"). Under the Banking Code, no dividends may be paid except from "accumulated net earnings" (generally, undivided profits). Under the FDIA, an insured bank may pay no dividends if the bank is in arrears in the payment of any insurance assessment due to the FDIC. Under the Banking Code, Republic would be limited to $48.2 million of dividends payable plus an additional amount equal to its net profit for 2020, up to the date of any such dividend declaration. However, dividends would be further limited in order to maintain capital ratios as discussed in "Capital Adequacy".

Federal regulatory authorities have adopted standards for the maintenance of adequate levels of regulatory capital by banks. Adherence to such standards further limits the ability of Republic to pay dividends to us.

Dividend Policy

We have not paid any cash dividends on our common stock, and have no plans to pay any cash dividends in 2020 or in the foreseeable future. See Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities of this Form 10-K for more information.

Deposit Insurance and Assessments

The FDIC is an independent federal agency that insures deposits, up to prescribed statutory limits, of federally insured banks and savings institutions and safeguards the safety and soundness of the banking and savings industries. The deposits of Republic are insured up to applicable limits per insured depositor by the FDIC. As noted above, pursuant to the Dodd-Frank Act, the maximum deposit insurance amount has been permanently increased to $250,000.

As an FDIC-insured bank, Republic is subject to FDIC insurance assessments. The FDIC regulations assess insurance premiums for small insured depository institutions based on a risk-based assessment system. Under this assessment system, the FDIC evaluates the risk of each financial institution based on regulatory capital ratios and other supervisory factors. The rules base assessments on an institution's average consolidated total assets less its average tangible equity, as opposed to total deposits.

The FDIC has authority to increase insurance assessments. Any future increase in insurance premiums may adversely affect our results of operations.

The Dodd-Frank Act also requires the FDIC to take such steps as are necessary to increase the reserve ratio of the DIF from 1.15% to 1.35% of insured deposits by 2020. The reserve ratio is the DIF balance divided by estimated insured deposits. The reserve ratio reached 1.36% on September 30, 2018. Because the reserve ratio has reached 1.35%, two deposit insurance assessment changes occurred under FDIC regulations: (1) surcharges on insured depository institutions with total consolidated assets of $10 billion or more (large institutions) will cease; and (2) banks with assets of less than $10 billion, such as us, began to receive assessment credits for the portion of their assessments that contributed to the growth in the reserve ratio from between 1.15% and 1.35%, as the reserve ratio exceeded 1.38% as of the June 30, 2019 assessment date, with credits received in September and December 2019.

In addition to paying basic deposit insurance assessments, the FDIC collected Financing Corporation ("FICO") assessments to pay interest on FICO bonds. FICO bonds were issued in the late 1980's to recapitalize the (former) Federal Savings & Loan Insurance Corporation. The last of the remaining FICO bonds matured in September 2019. The last FICO assessment was collected on March 29, 2019.

Capital Adequacy

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

The capital adequacy rules define qualifying capital instruments and specify minimum amounts of capital as a percentage of assets that banking organizations are required to maintain. Common equity Tier 1 capital generally includes common stock and related surplus, retained earnings and, in certain cases and subject to certain limitations, minority interest in consolidated subsidiaries, less goodwill, other non-qualifying intangible assets and certain other deductions. Tier 1 capital for banks and bank holding companies generally consists of the sum of common equity Tier 1 elements, non-cumulative perpetual preferred stock, and related surplus in certain cases and subject to limitations, minority interests in consolidated subsidiaries that do not qualify as common equity Tier 1 capital, less certain deductions. Tier 2 capital generally consists of hybrid capital instruments, perpetual debt and mandatory convertible debt securities, cumulative perpetual preferred stock, term subordinated debt and intermediate-term preferred stock, and, subject to limitations, allowances for loan losses. The sum of Tier 1 and Tier 2 capital less certain required deductions represents qualifying total risk-based capital. Prior to the effectiveness of certain provisions of the Dodd-Frank Act, bank holding companies were permitted to include trust preferred securities and cumulative perpetual preferred stock in Tier 1 capital, subject to limitations. However, the Federal Reserve's capital rule applicable to bank holding companies permanently grandfathers non-qualifying capital instruments, including trust preferred securities, issued before May 19, 2010 by depository institution holding companies with less than $15 billion in total assets as of December 31, 2009, subject to a limit of 25% of Tier 1 capital. In addition, under rules that became effective January 1, 2015, accumulated other comprehensive income (positive or negative) must be reflected in Tier 1 capital; however, we were permitted to make a one-time, permanent election to continue to exclude accumulated other comprehensive income from capital. We have made this election.

Under the capital rules, risk-based capital ratios are calculated by dividing common equity Tier 1, Tier 1, and total risk-based capital, respectively, by risk-weighted assets. Assets and off-balance sheet credit equivalents are assigned to one of several categories of risk-weights, based primarily on relative risk. Under applicable capital rules, Republic is required to maintain a minimum common equity Tier 1 capital ratio requirement of 4.5%, a minimum Tier 1 capital ratio requirement of 6%, a minimum total capital requirement of 8% and a minimum leverage ratio requirement of 4%. Under the rules, in order to avoid limitations on capital distributions (including dividend payments and certain discretionary bonus payments to executive officers), a banking organization must hold a capital conservation buffer comprised of common equity Tier 1 capital above its minimum risk-based capital requirements in an amount greater than 2.5% of total risk-weighted assets. The capital conservation buffer, which is composed of common equity Tier 1 capital, began on January 1, 2016 at the 0.625% level and was phased in over a three year period (increasing by that amount on each January 1, until it reached 2.5% on January 1, 2019). Implementation of the deductions and other adjustments to common equity Tier 1 capital began on January 1, 2015 and were phased-in over a three-year period.

The following table shows the required capital ratios with the conversation buffer over the phase-in period.

	Basel III Community Banks Minimum Capital Ratio Requirements			
	2016	2017	2018	2019
Common equity tier 1 capital (CET1)	5.125%	5.750%	6.375%	7.000%
Tier 1 capital (to risk weighted assets)	6.625%	7.250%	7.875%	8.500%
Total capital (to risk-weighted assets)	8.625%	9.250%	9.875%	10.500%

Republic is considered "well capitalized" under the FDIC's prompt corrective action rules. The risk-based capital standards are required to take adequate account of interest rate risk, concentration of credit risk and the risks of non-traditional activities.

Economic Growth, Regulatory Relief, and Consumer Protection Act

The Economic Growth, Regulatory Relief, and Consumer Protection Act, enacted in May 2018 (the "Regulatory Relief Act"), amended certain provisions of the Dodd-Frank Act, as well as certain other statutes administered by the federal banking agencies. Some of the key provisions of the Regulatory Relief Act as it relates to community banks and bank holding companies include: (i) designating mortgages held in portfolio as "qualified mortgages" for banks with less than $10 billion in assets, subject to certain documentation and product limitations; (ii) exempting banks with less than $10 billion in assets (and total trading assets and trading liabilities of 5% or less of total assets) from Volcker Rule requirements relating to proprietary trading; (iii) simplifying capital calculations for banks with less than $10 billion in assets by requiring federal banking agencies to establish a community bank leverage ratio of tangible equity to average consolidated assets of not less than 8% or more than 10%, and provide that banks that maintain tangible equity in excess of such ratio will be deemed to be in compliance with risk-based capital and leverage requirements; (iv) assisting smaller banks with obtaining stable funding by providing an exception for reciprocal deposits from FDIC restrictions on acceptance of brokered deposits; (v) raising the eligibility for use of short-form Call Reports from $1 billion to $5 billion in assets; (vi) clarifying definitions pertaining to high volatility commercial real estate loans, which require higher capital allocations, so that only loans with increased risk are subject to higher risk weightings; and (vii) changing the eligibility for use of the small bank holding company policy statement from institutions with under $1 billion in assets to institutions with under $3 billion in assets.

In September 2019, the federal banking agencies approved the final rule to implement the provisions of Section 201 of the Regulatory Relief Act relating to the community bank leverage ratio ("CBLR"). Under the new rule, which became effective January 1, 2020, a qualifying community banking organization is defined as a depository institution or depository institution holding company with less than $10 billion in assets. A qualifying community banking organization has the option to elect the CBLR framework if its CBLR is greater than 9%, it has off-balance sheet exposures of 25% or less of consolidated assets, and trading assets and liabilities of 5% or less of total consolidated assets. The leverage ratio for purposes of the CBLR is calculated as Tier I capital divided by average total assets, consistent with the manner banking organizations calculate the leverage ratio under generally applicable capital rules. Qualifying community banking organizations that exceed the CBLR level established by the agencies, and that elect to be covered by the CBLR framework, will be considered to have met: (i) the generally applicable leverage and risk-based capital requirements under the banking agencies' capital rules; (ii) the capital ratio requirements necessary to be considered "well capitalized" under the banking agencies' prompt corrective action framework in the case of insured depository institutions; and (iii) any other applicable capital or leverage requirements. For institutions that fall below the 9% capital requirement but remain above 8%, are allowed a two-quarter grace period to either meet the qualifying criteria again or to comply with the generally applicable capital rules. We have not at this time opted to use the CBLR framework. We do not believe that the changes resulting from the Regulatory Relief Act, including whether we elect to use the CBLR framework, will materially impact our business, operations, or financial results.

Legislative and Regulatory Changes

We are heavily regulated by regulatory agencies at the federal and state levels. We, like most of our competitors, have faced and expect to continue to face increased regulation and regulatory and political scrutiny, which creates significant uncertainty for us as well as the financial services industry in general.

Future Legislative and Regulatory Developments

It is conceivable that compliance with current or future legislative and regulatory initiatives could require us to change certain business practices, impose significant additional costs on us, limit the products that we offer, result in a significant loss of revenue, limit our ability to pursue business opportunities in an efficient manner, require us to increase our regulatory capital, cause business disruptions, impact the value of assets that we hold or otherwise adversely affect our business, results of operations, or financial condition. The extent of changes imposed by any future regulatory initiatives could make it more difficult for us to comply in a timely manner, which could further limit our operations, increase compliance costs or divert management attention or other resources. The long-term impact of legislative and regulatory initiatives on our business practices and revenues will depend upon the successful implementation of our strategies, consumer behavior, and competitors' responses to such initiatives, all of which are difficult to predict. Additionally, we may pursue, through appropriate avenues, legislative and regulatory advocacy to provide our input on possible legislative and regulatory developments.

Profitability, Monetary Policy and Economic Conditions

In addition to being affected by general economic conditions, the earnings and growth of Republic will be affected by the policies of regulatory authorities, including the Pennsylvania Department of Banking and Securities, the FDIC, and the Federal Reserve. An important function of the Federal Reserve is to regulate the supply of money and other credit conditions in order to manage interest rates. The monetary policies and regulations of the Federal Reserve have had a significant effect on the operating results of commercial banks in the past and are expected to continue to do so in the future. The effects of such policies upon the future business, earnings and growth of Republic cannot be determined.

Employees

As of December 31, 2019, we had a total of 599 employees, including 537 full-time employees.

Item 1A: Risk Factors

In addition to the other information included elsewhere in this report and in “Management’s Discussion and Analysis of Results of Operations and Financial Condition,” the following factors could significantly affect our business, financial condition, results of operations, or future prospects. Any of the following risks, either alone or taken together, could materially and adversely affect our business, financial condition, results of operations, or future prospects. If one or more of these or other risks or uncertainties materialize, or if our underlying assumptions prove to be incorrect, our actual results may be materially adversely affected. There may be additional risks that we do not presently know or that we currently believe are immaterial which could also materially adversely affect our business, financial condition, results of operations, or future prospects.

We are subject to credit risk in connection with our lending activities, and our financial condition and results of operations may be negatively impacted by economic conditions and other factors that adversely affect our borrowers.

Our financial condition and results of operations are affected by the ability of our borrowers to repay their loans, and in a timely manner. Lending money is a significant part of the banking business. Borrowers, however, do not always repay their loans. The risk of non-payment is assessed through our underwriting and loan review procedures based on several factors including credit risks of a particular borrower, changes in economic conditions, the duration of the loan, and in the case of a collateralized loan, uncertainties as to the future value of the collateral and other factors. Despite our efforts, we do and will experience loan losses, and our financial condition and results of operations will be adversely affected. Our non-performing assets were approximately $14.1 million at December 31, 2019. Our allowance for loan losses was approximately $9.3 million at December 31, 2019. Our loans between thirty and eighty-nine days delinquent totaled $1.9 million at December 31, 2019.

Our concentration of commercial real estate loans could result in increased loan losses and costs of compliance.

A substantial portion of our loan portfolio is comprised of commercial real estate loans. The commercial real estate market is cyclical and poses risks of loss to us because of the concentration of commercial real estate loans in our loan portfolio, and the lack of diversity in risk associated with such a concentration. Banking regulators have been giving and continue to give commercial real estate lending greater scrutiny, and banks with larger commercial real estate loan portfolios are expected by their regulators to implement improved underwriting, internal controls, risk management policies and portfolio stress-testing practices to manage risks associated with commercial real estate lending. In addition, commercial real estate lenders are making greater provisions for loan losses and accumulating higher capital levels as a result of commercial real estate lending exposures. Additional losses or regulatory requirements related to our commercial real estate loan concentration could materially adversely affect our business, financial condition and results of operations.

Our allowance for loan losses may not be adequate to absorb actual loan losses, and we may be required to make further provisions for loan losses and charge off additional loans in the future, which could materially and adversely affect our business.

We attempt to maintain an allowance for loan losses, established through a provision for loan losses accounted for as an expense, which is adequate to absorb losses inherent in our loan portfolio. If our allowance for loan losses is inadequate, it may have a material adverse effect on our financial condition and results of operations.

The determination of the allowance for loan losses inherently involves a high degree of subjectivity and judgment and requires us to make significant estimates of current credit risks and future trends, all of which may undergo material changes. Changes in economic conditions affecting borrowers, new information regarding existing loans, identification of additional problem loans and other factors, both within and outside of our control, may require us to increase our allowance for loan losses. Increases in nonperforming loans have a significant impact on our allowance for loan losses. Our allowance for loan losses may not be adequate to absorb actual loan losses. If trends in the real estate markets were to deteriorate, we could experience increased delinquencies and credit losses, particularly with respect to real estate construction and land acquisition and development loans and one-to-four family residential mortgage loans. As a result, we may have to make provisions for loan losses and charge off loans in the future, which could materially adversely affect our financial condition and results of operations.

In addition to our internal processes for determining loss allowances, bank regulatory agencies periodically review our allowance for loan losses and may require us to increase the provision for loan losses or recognize further loan charge-offs, based on judgments that differ from those of our management. If loan charge-offs in future periods exceed the allowance for loan losses, we will need to increase our allowance for loan losses. Furthermore, growth in our loan portfolio would generally lead to an increase in the provision for loan losses. Any increases in our allowance for loan losses will result in a decrease in net income and capital, and may have a material adverse effect on our financial condition, results of operations and cash flows.

We are required to make significant estimates and assumptions in the preparation of our financial statements, including our allowance for loan losses, and our estimates and assumptions may not be accurate.

The preparation of our consolidated financial statements in conformity with accounting principles generally accepted in the United States of America, or GAAP, require our management to make significant estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the consolidated financial statements, and the reported amounts of income and expense during the reporting periods. Critical estimates are made by management in determining, among other things, the allowance for loan losses, carrying values of other real estate owned, assessment of other than temporary impairment ("OTTI") of investment securities, fair value of financial instruments, and the realization of deferred income taxes. If our underlying estimates and assumptions prove to be incorrect, our financial condition and results of operations may be materially adversely affected.

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

In prior years we recorded other-than-temporary impairment charges for certain bank pooled trust preferred securities, and we may be required to record future impairment charges on our investment securities if they suffer declines in value that we determine are other-than-temporary. Numerous factors, including the lack of liquidity for re-sales of certain investment securities, the absence of reliable pricing information for investment securities, adverse changes in the business climate, adverse regulatory actions or unanticipated changes in the competitive environment, could have a negative effect on our investment portfolio in future periods. If an impairment charge is significant enough, it could affect the Bank's ability to pay dividends, which could materially adversely affect us. Significant impairment charges could also negatively impact our regulatory capital ratios and result in us not being classified as "well-capitalized" for regulatory purposes.

Our net interest income, net income and results of operations are sensitive to fluctuations in interest rates.

Our net income depends on the net income of Republic, and Republic is dependent primarily upon its net interest income, which is the difference between the interest earned on its interest-earning assets, such as loans and investments, and the interest paid on its interest-bearing liabilities, such as deposits and borrowings.

Our results of operations will be affected by changes in market interest rates and other economic factors beyond our control. If our interest-earning assets have longer effective maturities than our interest-bearing liabilities, the yield on our interest-earning assets generally will adjust more slowly than the cost of our interest-bearing liabilities, and, as a result, our net interest income generally will be adversely affected by material and prolonged increases in interest rates, and positively affected by comparable declines in interest rates. Conversely, if liabilities re-price more slowly than assets, net interest income would be adversely affected by declining interest rates, and positively affected by increasing interest rates. At any time, our assets and liabilities will reflect interest rate risk of some degree.

Potential concerns for the longer term economic outlook include the continued flattening of the yield curve and an increasingly inverted yield curve (which may or may not signal a future recession), the risk of economic overheating in the near future, and concerns surrounding the long term fiscal position of the United States. In addition to affecting interest income and expense, changes in interest rates also can affect the value of our interest-earning assets, comprising fixed and adjustable-rate instruments, as well as the ability to realize gains from the sale of such assets. Generally, the value of fixed-rate instruments fluctuates inversely with changes in interest rates, and changes in interest rates may therefore have a material adverse effect on our results of operations.

We are a holding company dependent for liquidity on payments from our banking subsidiary, which payments are subject to restrictions.

We are a holding company and depend on dividends, distributions and other payments from Republic to fund dividend payments, if any, and to fund all payments on obligations. Republic and its subsidiaries are subject to laws that restrict dividend payments or authorize regulatory bodies to block or reduce the flow of funds from those subsidiaries to us. Restrictions or regulatory actions of that kind could impede our access to funds that we may need to make payments on our obligations or dividend payments, if any. In addition, our right to participate in a distribution of assets upon a subsidiary's liquidation or reorganization is subject to the prior claims of the subsidiary's creditors.

Our business is concentrated in and dependent upon the continued growth and welfare of our primary market area.

Our primary service area consists of Greater Philadelphia and Southern New Jersey. Our success depends upon the business activity, population, income levels, deposits and real estate activity in this area. Although our customers' businesses and financial interests may extend well beyond this area, adverse economic conditions that affect our primary service area could reduce our growth rate, affect the ability of our customers to repay their loans to us, and generally adversely affect our financial condition and results of operations. Because of our geographic concentration, we are less able than other regional or national financial institutions to diversify our credit risks across multiple markets.

Unfavorable economic and financial market conditions may adversely affect our financial position and results of operations.

Economic pressure on consumers and businesses and any resulting lack of confidence in the financial markets may adversely affect our business, financial condition, results of operations and stock price. A worsening of current economic conditions would likely exacerbate the adverse effects of market conditions on us and others in the industry. In particular, we may face the following risks in connection with these events:

- increased regulation of our industry and increased compliance costs;
- hampering our ability to assess the creditworthiness of customers and to estimate the losses inherent in our credit exposure, as such assessments are made more complex by these difficult market and economic conditions;
- increasing our credit risk, by increasing the likelihood that our major customers become insolvent and unable to satisfy their obligations to us;
- impairing our ability to originate loans, by making our customers and prospective customers less willing to borrow, and making loans that meet our underwriting criteria difficult to find; and
- limiting our interest income, by depressing the yields we are able to earn on our investment portfolio.

Our ability to use net operating loss carryforwards to reduce future tax payments may be limited.

As of December 31, 2019, we had approximately $24.1 million of U.S. Federal net operating loss carryforwards, referred to as "NOLs," available to reduce taxable income in future years.

Utilization of the NOLs may be subject to a substantial annual limitation due to ownership change limitations that may have occurred or that could occur in the future, as required by Section 382 of the Internal Revenue Code of 1986, as amended, referred to as the "Code." These ownership changes may limit the amount of NOLs that can be utilized annually to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382 of the Code results from a transaction or series of transactions over a three-year period resulting in an ownership change of more than 50 percentage points of the outstanding stock of a company by certain stockholders or public groups. In the event of an ownership change, Section 382 imposes an annual limitation on the amount of post-ownership change taxable income a corporation may offset with pre-ownership change NOLs. The limitation imposed by Section 382 for any post-change year would be determined by multiplying the value of our stock immediately before the ownership change (subject to certain adjustments) by the applicable long-term tax-exempt rate. Any unused annual limitation may be carried over to later years, and the limitation may under certain circumstances be increased by built-in gains which may be present with respect to assets held by us at the time of the ownership change that are recognized in the five-year period after the ownership change.

In addition, the ability to use NOLs will be dependent on our ability to generate taxable income. The NOLs may expire before we generate sufficient taxable income. There were no NOLs that expired in the fiscal years ended December 31, 2019 and December 31, 2018. There are no NOLs that could expire if not utilized for the year ending December 31, 2020.

Our assets as of December 31, 2019 included a deferred tax asset and we may not be able to realize the full amount of such asset.

We recognize deferred tax assets and liabilities based on differences between the financial statement carrying amounts and the tax bases of assets and liabilities. At December 31, 2019, the net deferred tax asset was $12.6 million, compared to a balance of $12.3 million at December 31, 2018.

We regularly review our deferred tax assets for recoverability to determine whether it is more likely than not (i.e. likelihood of more than 50%) that some portion, or all, of the deferred tax asset will not be realized within its life cycle, based on the weight of available evidence. If management makes a determination based on the available evidence that it is more likely than not that some portion or all of the deferred tax assets will not be realized in future periods, a valuation allowance is calculated and recorded. These determinations are inherently subjective and dependent upon estimates and judgments concerning management's evaluation of both positive and negative evidence.

Based on the analysis of the available positive and negative evidence, we determined that a valuation allowance should not be recorded as of December 31, 2019. We used projections of future taxable income, exclusive of reversing temporary timing differences and carryforwards, as a factor to project recoverability of the deferred tax asset balance. There can be no assurance as to when we will be in a position to fully recapture the benefits of our deferred tax asset. Further discussion on the analysis of our deferred tax asset can be found in the "Provision (Benefit) for Income Taxes" section of Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

We are required to adopt the FASB's accounting standard which requires measurement of certain financial assets (including loans) using the current expected credit losses (CECL) beginning in calendar year 2020.

Current GAAP requires an incurred loss methodology for recognizing credit losses that delays recognition until it is probable a loss has been incurred. The FASB's amendment replaces the current incurred loss methodology with a methodology that reflects expected credit losses and requires consideration of a broader range of reasonableness and supportable information to inform credit loss estimates. We are currently evaluating the impact of ASU 2016-13, continuing our implementation efforts and reviewing the loss modeling requirements consistent with lifetime expected loss estimates. Calculations of expected losses under the new guidance were run parallel to the calculations under existing guidance to assess and evaluate the potential impact to our financial statements. The new model includes different assumptions used in calculating credit losses, such as estimating losses over the estimated life of a financial asset and considers expected future changes in macroeconomic conditions. The adoption of this ASU may result in an increase to our allowance for loan losses which will depend upon the nature and characteristics of our loan portfolio at the adoption date, as well as the macroeconomic conditions and forecasts at that date. We expect an initial increase to the allowance for credit losses, in the range of 0% to 11% of the December 31, 2019 allowance for credit losses, or an incremental increase to the allowance for credit losses in the range of $0 up to approximately $1.0 million. When finalized, this one-time increase as a result of the adoption of ASU 2016-13 will be recorded, net of tax, as an adjustment to retained earnings effective January 1, 2020. This estimate is subject to change based on continuing refinement and validation of the model and methodologies. This ASU became effective for us as of January 1, 2020.

Our mortgage lending business may not provide us with significant noninterest income.

In 2019, we originated $461 million residential mortgage loans and sold $328 million of those loans to investors on the secondary market. The residential mortgage business is highly competitive, and highly susceptible to changes in market interest rates, consumer confidence levels, employment statistics, the capacity and willingness of secondary market purchasers to acquire and hold or securitize loans, and other factors beyond our control.

Because we sell a substantial number of the mortgage loans we originate, the profitability of our mortgage banking business also depends in large part on our ability to aggregate a high volume of loans and sell them in the secondary market at a gain. In fact, as rates rise, we expect increasing industry-wide competitive pressures related to changing market conditions to reduce our pricing margins and mortgage revenues generally. Thus, in addition to our dependence on the interest rate environment, we are dependent upon (i) the existence of an active secondary market and (ii) our ability to profitably sell loans or securities into that market. If our level of mortgage production declines, the profitability will depend upon our ability to reduce our costs commensurate with the reduction of revenue from our mortgage operations.

Our ability to originate and sell mortgage loans readily is dependent upon the availability of an active secondary market for single-family mortgage loans, which in turn depends in part upon the continuation of programs currently offered by government-sponsored entities ("GSEs") and other institutional and non-institutional investors. These entities account for a substantial portion of the secondary market in residential mortgage loans. We are highly dependent on these purchasers continuing their mortgage purchasing programs. Additionally, because the largest participants in the secondary market are Ginnie Mae, Fannie Mae and Freddie Mac, GSEs whose activities are governed by federal law, any future changes in laws that significantly affect the activity of these GSEs could, in turn, adversely affect our operations. In September 2008, Fannie Mae and Freddie Mac were placed into conservatorship by the U.S. government. The federal government has for many years considered proposals to reform Fannie Mae and Freddie Mac, but the results of any such reform, and their impact on us, are difficult to predict. To date, no reform proposal has been enacted.

We may be required to repurchase mortgage loans or indemnify buyers against losses in some circumstances, which could harm liquidity, results of operations and financial condition.

We sell a large portion of the mortgage loans that we originate. When mortgage loans are sold, whether as whole loans or pursuant to a securitization, we are required to make customary representations and warranties to purchasers, guarantors and insurers, including the GSEs, about the mortgage loans and the manner in which they were originated. Whole loan sale agreements require repurchase or substitute mortgage loans, or indemnify buyers against losses, in the event we breach these representations or warranties. In addition, we may be required to repurchase mortgage loans as a result of early payment default of the borrower on a mortgage loan, resulting in these mortgage loans being placed on our books and subjecting us to the risk of a potential default. If repurchase and indemnity demands increase and such demands are valid claims and are in excess of our provision for potential losses, our liquidity, results of operations and financial condition may be adversely affected.

Potential acquisitions may disrupt our business and dilute shareholder value.

We regularly evaluate opportunities to acquire and invest in banks and in other complementary businesses. As a result, we may engage in negotiations or discussions that, if they were to result in a transaction, could have a material effect on our operating results and financial condition, including short and long-term liquidity and capital structure. Our acquisition activities could be material to us. For example, we could issue additional shares of common stock in a purchase transaction, which could dilute current shareholders' ownership interest. These activities could require us to use a substantial amount of cash, other liquid assets, and/or incur debt. In addition, if goodwill recorded in connection with our prior or potential future acquisitions were determined to be impaired, then we would be required to recognize a charge against our earnings, which could materially and adversely affect our results of operations during the period in which the impairment was recognized. Any potential charges for impairment related to goodwill would not impact cash flow, tangible capital or liquidity but would decrease shareholders' equity.

Our acquisition activities could involve a number of additional risks, including the risks of:

- incurring time and expense associated with identifying and evaluating potential acquisitions and negotiating potential transactions;
- using inaccurate estimates and judgments to evaluate credit, operations, management, and market risks with respect to the target institution or its assets;
- the time and expense required to integrate the operations and personnel of the combined businesses;
- creating an adverse short-term effect on our results of operations; and
- losing key employees and customers as a result of an acquisition that is poorly conceived.

We may not be successful in overcoming these risks or any other problems encountered in connection with potential acquisitions. Our inability to overcome these risks could have an adverse effect on our ability to achieve our business strategy and maintain our market value.

We may not be able to manage our growth, which may adversely impact our financial results.

As part of our retail growth strategy, we may expand into additional communities or attempt to strengthen our position in our current markets by opening new stores and acquiring existing stores of other financial institutions. To the extent that we undertake additional stores openings and acquisitions, we are likely to experience the effects of higher operating expenses relative to operating income from the new operations, which may have an adverse effect on our levels of reported net income, return on average equity and return on average assets. Other effects of engaging in such growth strategies may include potential diversion of our management's time and attention and general disruption to our business.

As part of our retail strategy, we plan to open new stores in our primary service area, including Southern New Jersey, the Greater Philadelphia area, and New York City. We may not, however, be able to identify attractive locations on terms favorable to us, obtain regulatory approvals, or hire qualified management to operate new stores. In addition, the organizational and overhead costs may be greater than we anticipate. New stores may take longer than expected to reach profitability, or may not become profitable. The additional costs of starting new stores may adversely impact our financial results.

Our ability to manage growth successfully will depend on whether we can continue to fund our growth while maintaining cost controls, as well as on factors beyond our control, such as national and regional economic conditions and interest rate trends. If we are not able to control costs, such growth could adversely impact our earnings and financial condition.

Our retail strategy relies heavily on our management team, and the unexpected loss of key managers may adversely affect our operations.

In recent years, we have been successful in attracting new and talented employees to Republic, to add to our management team. We believe that our ability to successfully implement our retail strategy will require us to retain and attract additional management experienced in banking and financial services, and familiar with the communities in our market. Our ability to retain executive officers, the current management team, branch managers and loan officers of Republic will continue to be important to the successful implementation of our strategy. It is also critical, as we grow, to be able to attract and retain additional members of the management team and qualified loan officers with the appropriate level of experience and knowledge about our market areas to implement the community-based operating strategy.

The unexpected loss of services of any key management personnel, or the inability to recruit and retain qualified personnel in the future, could have an adverse effect on our business, financial condition and results of operations.

We are subject to numerous governmental regulations and to comprehensive examination and supervision by regulators, which could have an adverse impact on our operations and could restrict the scope of our operations.

Both the Company and Republic operate in a highly regulated environment and are subject to supervision and regulation by several governmental regulatory agencies, including the Board of Governors of the Federal Reserve System, the FDIC and the Pennsylvania Department of Banking and Securities ("PDB"). We are subject to federal and state regulations governing virtually all aspects of our activities, including lines of business, capital, liquidity, investments, payment of dividends, and others. Regulations that apply to us are generally intended to provide protection for depositors and customers rather than investors.

We are subject to extensive regulation and supervision under federal and state laws and regulations. See Item 1. Business - Supervision and Regulation. The requirements and limitations imposed by such laws and regulations limit the manner in which we conduct our business, undertake new investments and activities and obtain financing. Financial institution regulation has been the subject of significant legislation in recent years and may be the subject of further significant legislation in the future, none of which is within our control. Compliance with these rules could impose additional costs on banking entities and their holding companies. Management has reviewed the new standards and will continue to evaluate all options and strategies to ensure ongoing compliance with the new standards, notwithstanding Republic's current status as well-capitalized.

New programs and proposals may subject us and other financial institutions to additional restrictions, oversight and costs that may have an adverse impact on our business, financial condition, results of operations or the price of our common stock. Federal and state regulatory agencies also frequently adopt changes to their regulations or change the manner in which existing regulations are applied or enforced. We cannot predict the substance or impact of future legislation, regulation or the application thereof. Compliance with such current and potential regulation and scrutiny may significantly increase our costs, impede the efficiency of our internal business processes, require us to increase our regulatory capital and limit our ability to pursue business opportunities in an efficient manner.

We face significant competition in our market from other banks and financial institutions.

The banking and financial services industry in our market area is highly competitive. We may not be able to compete effectively in our markets, which could adversely affect our results of operations. The increasingly competitive environment is a result of changes in regulation, changes in technology and product delivery systems, and consolidation among financial service providers. Larger institutions have greater access to capital markets, with higher lending limits and a broader array of services. Competition may require increases in deposit rates and decreases in loan rates, and adversely impact our net interest margin.

We may not have the resources to effectively implement new technologies, which could adversely affect our competitive position and results of operations.

The financial services industry is constantly undergoing technological changes with frequent introductions of new technology-driven products and services. In addition to better serving customers, the effective use of technology increases efficiency and enables financial institutions to reduce costs. Our future success will depend in part upon our ability to address the needs of our customers by using technology to provide products and services that will satisfy customer demands for convenience as well as to create additional efficiencies in our operations as we continue to grow and expand in our market. Many of our larger competitors have substantially greater resources to invest in technological improvements. As a result, they may be able to offer additional or superior products to those that we will be able to offer, which would put us at a competitive disadvantage. Accordingly, we may not be able to effectively implement new technology-driven products and services or be successful in marketing such products and services to our customers. If we are unable to do so, our competitive position and results of operations could be adversely affected.

Our disclosure controls and procedures and our internal control over financial reporting may not achieve their intended objectives.

We maintain disclosure controls and procedures designed to ensure that we timely report information as specified in the rules and forms of the Securities and Exchange Commission. We also maintain a system of internal control over financial reporting. These controls may not achieve their intended objectives. Control processes that involve human diligence and compliance, such as our disclosure controls and procedures and internal control over financial reporting, are subject to lapses in judgment and breakdowns resulting from human failures. Controls can also be circumvented by collusion or improper management override. Because of such limitations, there are risks that material misstatements due to error or fraud may not be prevented or detected and that information may not be reported on a timely basis. If our controls are not effective, it could have a material adverse effect on our financial condition, results of operations, and market for our common stock, and could subject us to regulatory scrutiny.

We are subject to certain operational risks, including, but not limited to, customer or employee fraud and data processing system failures and errors.

Employee errors and misconduct could subject us to financial losses or regulatory sanctions and seriously harm our reputation. Misconduct by our employees could include hiding unauthorized activities from us, improper or unauthorized activities on behalf of our customers or improper use of confidential information. It is not always possible to prevent employee errors and misconduct, and the precautions we take to prevent and detect this activity may not be effective in all cases. Employee errors could also subject us to financial claims for negligence.

We maintain a system of internal controls and insurance coverage to mitigate operational risks, including data processing system failures and errors, and customer or employee fraud. Should our internal controls fail to prevent or detect an occurrence, or if any resulting loss is not insured or exceeds applicable insurance limits, it could have a material adverse effect on our business, financial condition and results of operations.

System failure or breaches of our network security could subject us to increased operating costs as well as litigation and other liabilities.

The computer systems and network infrastructure we use could be vulnerable to unforeseen problems. Our operations are dependent upon our ability to protect our computer equipment against damage from physical theft, fire, power loss, telecommunications failure or a similar catastrophic event, as well as from security breaches, denial of service attacks, viruses, worms and other disruptive problems caused by hackers. Any damage or failure that causes an interruption in our operations could have a material adverse effect on our financial condition and results of operations. Computer break-ins, phishing and other disruptions could also jeopardize the security of information stored in and transmitted through our computer systems and network infrastructure, which may result in significant liability to us and may cause existing and potential customers to refrain from doing business with us. Although we, with the help of third-party service providers, intend to continue to implement security technology and establish operational procedures to prevent such damage, these security measures may not be successful. In addition, advances in computer capabilities, new discoveries in the field of cryptography or other developments could result in a compromise or breach of the algorithms we and our third-party service providers use to encrypt and protect customer transaction data. A failure of such security measures could have a material adverse effect on our financial condition and results of operations.

If we want to, or are compelled to, raise additional capital in the future, that capital may not be available to us when it is needed or on terms that are favorable to us or current shareholders.

Federal banking regulators require us, and Republic, to maintain capital to support our operations. Regulatory capital ratios are defined and required ratios are established by laws and regulations promulgated by banking regulatory agencies. At December 31, 2019, our regulatory capital ratios were above "well capitalized" levels under current bank regulatory guidelines. To be "well capitalized," banking companies generally must maintain a Tier 1 leverage ratio of at least 5%, a Common Equity Tier 1 ratio of at least 6.5%, a Tier 1 risk-based capital ratio of at least 8%, and a total risk-based capital ratio of at least 10%. Regulators, however, may require us, or Republic, to maintain higher regulatory capital ratios.

Our ability to raise additional capital in the future will depend on conditions in the capital markets at that time, which are outside of our control, on our financial performance and on other factors. Accordingly, we may not be able to raise additional capital on terms and time frames acceptable to us, or at all. If we cannot raise additional capital in sufficient amounts when needed, our ability to comply with regulatory capital requirements could be materially impaired. Additionally, the inability to raise capital in sufficient amounts may adversely affect our operations, financial condition and results of operations. Our ability to borrow could also be impaired by factors that are nonspecific to us, such as disruption of the financial markets or negative news and expectations about the prospects for the financial services industry. If we raise capital through the issuance of additional shares of our common stock or other securities, we would likely dilute the ownership interests of investors, and could dilute the per share book value and earnings per share of our common stock. Furthermore, a capital raise through issuance of additional shares may have an adverse impact on our stock price.

We may be exposed to environmental liabilities with respect to real estate that we have or had title to in the past.

A significant portion of our loan portfolio is secured by real property. In the course of our business, we may foreclose, accept deeds in lieu of foreclosure, or otherwise acquire real estate in connection with our lending activities. We also acquire real estate in connection with our store expansion plans and growth strategy. As a result, we could become subject to environmental liabilities with respect to these properties. We may become responsible to a governmental agency or third parties for property damage, personal injury, investigation and clean-up costs incurred by those parties in connection with environmental contamination, or may be required to investigate or clean-up hazardous or toxic substances, or chemical releases at a property. The costs associated with environmental investigation or remediation activities could be substantial. In addition, as the owner or former owner of a contaminated site, we may be subject to common law claims by third parties based on damages and costs resulting from environmental contamination emanating from the property. Although we have policies and procedures to perform an environmental review before acquiring title to any real property, these may not be sufficient to detect all potential environmental hazards. If we were to become subject to significant environmental liabilities, it could materially and adversely affect us.

Our common stock is not insured by any governmental entity and, therefore, an investment in our common stock involves risk.

Our common stock is not a deposit account or other obligation of any bank, and is not insured by the FDIC or any other governmental entity, and is subject to investment risk, including possible loss.

There may be future sales of our common stock, which may materially and adversely affect the market price of our common stock.

We are not restricted from issuing additional shares of our common stock, including securities that are convertible into or exchangeable or exercisable for shares of our common stock. Our issuance of shares of common stock in the future will dilute the ownership interests of our existing shareholders.

Additionally, the sale of substantial amounts of our common stock or securities convertible into or exchangeable or exercisable for our common stock, whether directly by us or by existing common shareholders in the secondary market, the perception that such sales could occur or the availability for future sale of shares of our common stock or securities convertible into or exchangeable or exercisable for our common stock could, in turn, materially and adversely affect the market price of our common stock and our ability to raise capital through future offerings of equity or equity-related securities. The convertible trust preferred securities of Republic First Bancorp Capital Trust IV were converted into 1.7 million shares of our common stock in the years 2017 and 2018.

In addition, our Board of Directors is authorized to designate and issue preferred stock without further shareholder approval, and we may issue other equity securities that are senior to our common stock in the future for a number of reasons, including, without limitation, to support operations and growth, to maintain our capital ratios and to comply with any future changes in regulatory standards.

Our common stock is currently traded on the Nasdaq Global Market. During 2019, the average daily trading volume for our common stock was approximately 156,200 shares. Sales of our common stock may place significant downward pressure on the market price of our common stock. Furthermore, it may be difficult for holders to resell their shares at prices they find attractive, or at all.

Our common stock is subordinate to our existing and future indebtedness and any preferred stock and effectively subordinated to all indebtedness and preferred equity claims against our subsidiaries.

Shares of our common stock are common equity interests in us and, as such, will rank junior to all of our existing and future indebtedness and other liabilities. Additionally, holders of our common stock may become subject to the prior dividend and liquidation rights of holders of any classes or series of preferred stock that our Board of Directors may designate and issue without any action on the part of the holders of our common stock. Furthermore, our right to participate in a distribution of assets upon any of our subsidiaries' liquidation or reorganization is subject to the prior claims of that subsidiary's creditors and preferred shareholders. As of December 31, 2019, we had $11.3 million of outstanding debt related to trust preferred securities.

Our ability to pay dividends depends upon the results of operations of our subsidiaries.

We have never declared or paid cash dividends on our common stock. Our Board of Directors intends to follow a policy of retaining earnings for the purpose of increasing our capital for the foreseeable future.

Holders of our common stock are entitled to receive dividends if, as and when declared from time to time by our Board of Directors in its sole discretion out of funds legally available for that purpose, after debt service payments and payments of dividends required to be paid on our outstanding preferred stock, if any.

While we, as a bank holding company, are not subject to certain restrictions on dividends applicable to Republic, our ability to pay dividends to the holders of our common stock will depend to a large extent upon the amount of dividends paid by Republic to us. Regulatory authorities restrict the amount of cash dividends Republic can declare and pay without prior regulatory approval. Presently, Republic cannot declare or pay dividends in any one-year in excess of retained earnings for that year subject to risk based capital requirements.

If we fail to maintain an effective system of internal control over financial reporting and disclosure controls and procedures, current and potential shareholders may lose confidence in our financial reporting and disclosures and could subject us to regulatory scrutiny.

Pursuant to Section 404 of the Sarbanes-Oxley Act of 2002, referred to as Section 404, we are required to include in our Annual Reports on Form 10-K, our management's report on internal control over financial reporting. While we have reported no material weaknesses in the Form 10-K for the fiscal year ended December 31, 2019, we cannot guarantee that we will not have any material weaknesses in the future.

Compliance with the requirements of Section 404 is expensive and time-consuming. If, in the future, we fail to complete this evaluation in a timely manner we could be subject to regulatory scrutiny and a loss of public confidence in our internal control over financial reporting. In addition, any failure to maintain an effective system of disclosure controls and procedures could cause our current and potential shareholders and customers to lose confidence in our financial reporting and disclosure required under the Exchange Act, which could adversely affect our business.

Our governing documents, Pennsylvania law, and current policies of our Board of Directors contain provisions, which may reduce the likelihood of a change in control transaction, which may otherwise be available and attractive to shareholders.

Our articles of incorporation and bylaws contain certain anti-takeover provisions that may make it more difficult or expensive or may discourage a tender offer, change in control or takeover attempt that is opposed by our Board of Directors. In particular, the articles of incorporation and bylaws classify our Board of Directors into three groups, so that shareholders elect only approximately one-third of the Board each year; permit shareholders to remove directors only for cause and only upon the vote of the holders of at least 75% of the voting shares; require our shareholders to give us advance notice to nominate candidates for election to the Board of Directors or to make shareholder proposals at a shareholders' meeting; require the vote of the holders of at least 75% of our voting shares for shareholder amendments to our bylaws; require the vote of the holders of at least 75% of our voting shares to approve certain business combinations; and restrict the holdings and voting rights of shareholders who would acquire more than 10% of our outstanding common stock without the approval of two-thirds of our Board of Directors. These provisions of our articles of incorporation and bylaws could discourage potential acquisition proposals and could delay or prevent a change in control, even though a majority of our shareholders may consider such proposals desirable. Such provisions could also make it more difficult for third parties to remove and replace the members of our Board of Directors. Moreover, these provisions could diminish the opportunities for shareholders to participate in certain tender offers, including tender offers at prices above the then-current market value of our common stock, and may also inhibit increases in the trading price of our common stock that could result from takeover attempts or speculation.

In addition, anti-takeover provisions in Pennsylvania law could make it more difficult for a third party to acquire control of us. These provisions could adversely affect the market price of our common stock and could reduce the amount that shareholders might receive if we are sold. For example, Pennsylvania law may restrict a third party's ability to obtain control of us and may prevent shareholders from receiving a premium for their shares of our common stock. Pennsylvania law also provides that our shareholders are not entitled by statute to propose amendments to our articles of incorporation.

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

LIBOR and certain other interest rate "benchmarks" are the subject of recent national, international, and other regulatory guidance and proposals for reform. These reforms may cause such benchmarks to perform differently than in the past or have other consequences which cannot be predicted. On July 27, 2017, the United Kingdom's Financial Conduct Authority, which regulates LIBOR, publicly announced that it intends to stop persuading or compelling banks to submit information to the administrator of LIBOR after 2021. The announcement indicates that the continuation of LIBOR on the current basis cannot be guaranteed after 2021. While there is no consensus on what rate or rates may become accepted alternatives to LIBOR, a group of market participants convened by the Federal Reserve, the Alternative Reference Rate Committee, has selected the Secured Overnight Finance Rate as its recommended alternative to LIBOR. The Federal Reserve Bank of New York started to publish the Secured Overnight Financing Rate in April 2018. The Secured Overnight Financing Rate is a broad measure of the cost of overnight borrowings collateralized by Treasury securities that was selected by the Alternative Reference Rate Committee due to the depth and robustness of the U.S. Treasury repurchase market. At this time, it is impossible to predict whether the Secured Overnight Financing Rate will become an accepted alternative to LIBOR.

The market transition away from LIBOR to an alternative reference rate, such as the Secured Overnight Financing Rate, is complex and could have a range of adverse effects on our business, financial condition and results of operations. In particular, any such transition could:

- adversely affect the interest rates paid or received on, the revenue and expenses associated with or the value of our LIBOR-based assets and liabilities, which include certain variable rate loans and subordinated debt;

- adversely affect the interest rates paid or received on, the revenue and expenses associated with or the value of other securities or financial arrangements, given LIBOR's role in determining market interest rates globally;

- prompt inquiries or other actions from regulators in respect of our preparation and readiness for the replacement of LIBOR with an alternative reference rate; and

- result in disputes, litigation or other actions with counterparties regarding the interpretation and enforceability of certain fallback language in LIBOR-based contracts and securities.

The transition away from LIBOR to an alternative reference rate will require the transition to or development of appropriate systems and analytics to effectively transition our risk management and other processes from LIBOR-based products to those based on the applicable alternative reference rate, such as the Secured Overnight Financing Rate. There can be no guarantee that these efforts will successfully mitigate the operational risks associated with the transition away from LIBOR to an alternative reference rate.

The manner and impact of the transition from LIBOR to an alternative reference rate, as well as the effect of these developments on our funding costs, loan and investment and trading securities portfolios, asset-liability management, and business, is uncertain.

Our financial results may be adversely affected by changes in U.S. and non-U.S. tax and other laws and regulations.

On December 22, 2017, H.R.1, commonly known as the Tax Cuts and Jobs Act, was signed into law. The Tax Act includes many provisions that effected our income tax expenses, including reducing its corporate federal tax rate from 35% to 21% effective January 1, 2018. As a result of the rate reduction, we were required to re-measure, through income tax expense in the period of enactment, our deferred tax assets and liabilities using the enacted rate at which we expected them to be recovered or settled. The re-measurement of the net deferred tax asset resulted in additional income tax expense of $7.7 million recorded in fourth quarter 2017.

The ongoing success of our growth and expansion strategy, along with the successful integration of the mortgage company acquired in 2016 and the limited exposure remaining with current asset quality issues put us in a position to rely on projections of future taxable income when evaluating the need for a valuation allowance against deferred tax assets in the fourth quarter of 2017. Based on the guidance provided in ASC 740, we believed that the positive evidence considered at December 31, 2017 outweighed the negative evidence and that it was more likely than not that all of our deferred tax assets would be realized within their life cycle. Therefore, a valuation allowance was not required at December 31, 2017 and a $10.6 million benefit for income taxes was recorded in the fourth quarter of 2017 to reflect the reversal of the valuation allowance.

The $10.6 million tax benefit recognized when reversing the deferred tax asset valuation allowance offset the $7.7 million charge related to the change in the corporate tax rate resulting in a net tax benefit and increase in net income of $2.9 million during 2017.

Also on December 22, 2017, the SEC released SAB 118 to address any uncertainty or diversity of views in practice in accounting for the income tax effects of the Act in situations where a registrant does not have the necessary information available, prepared or analyzed in reasonable detail to complete this accounting in the reporting period that includes the enactment date. SAB 118 allowed for a measurement period not to extend beyond one year from the Act's enactment date to complete the necessary accounting.

We recorded provisional amounts of deferred income taxes using reasonable estimates in three areas where information necessary to complete the accounting was not available, prepared or analyzed as follows: (i) the deferred tax liability for temporary differences between the tax and financial reporting bases of fixed assets principally due to the accelerated depreciation under the Act which allowed for full expensing of qualified property purchased and placed in service after September 27, 2017; (ii) the deferred tax asset for temporary differences associated with accrued compensation was awaiting final determinations of amounts that were paid and deducted on the 2017 income tax returns and (iii) the deferred tax liability for temporary differences associated with equity investments in partnerships were awaiting receipt of Schedules K-1 from outside preparers, which was necessary to determine the 2017 tax impact from these investments.

In a fourth area, we made no adjustments to deferred tax assets representing future deductions for accrued compensation that were subject to new limitations under Internal Revenue Code Section 162(m) which, generally, limits the annual deduction for certain compensation paid to certain team members to $1 million. There was uncertainty in applying the newly enacted rules to existing contracts, and we were seeking further clarifications before completing its analysis. We completed the calculations for the provisional items with the completion of the 2017 tax returns and completed the analysis of the Section

162(m) rules after further guidance was issued. The impact of the completed calculations to the re-measurement of the deferred taxes resulted in an immaterial change and the analysis of the 162(m) rules resulted in no adjustment.

The outbreak of the recent coronavirus ("COVID-19"), or an outbreak of another highly infectious or contagious disease, could adversely affect our business, financial condition and results of operations.

Our business is dependent upon the willingness and ability of our customers to conduct banking and other financial transactions. The spread of a highly infectious or contagious disease, such as COVID-19, could cause severe disruptions in the U.S. economy, which could in turn disrupt the business, activities, and operations of our customers, as well our business and operations. Moreover, ssince the beginning of January 2020, the coronavirus outbreak has caused significant disruption in the financial markets both globally and in the United States. The spread of COVID-19, or an outbreak of another highly infectious or contagious disease, may result in a significant decrease in business and/or cause our customers to be unable to meet existing payment or other obligations to us, particularly in the event of a spread of COVID-19 or an outbreak of an infectious disease in our market area. Although we maintain contingency plans for pandemic outbreaks, a spread of COVID-19, or an outbreak of another contagious disease, could also negatively impact the availability of key personnel necessary to conduct our business. Such a spread or outbreak could also negatively impact the business and operations of third party service providers who perform critical services for our business. If COVID-19, or another highly infectious or contagious disease, spreads or the response to contain COVID-19 is unsuccessful, we could experience a material adverse effect on our business, financial condition, and results of operations.

Item 1B: Unresolved Staff Comments

None.

Item 2: Description of Properties

We currently have thirty-six locations that we utilize to conduct business. Seven of these locations are utilized for loan production offices, storage facilities, operations and back office support, and our corporate headquarters. Twenty nine properties are store locations that are open and operating as of December 31, 2019. We have another six locations under our control for future store locations. Of the forty-two total locations, eighteen are owned by Republic. The remaining twenty-four locations are subject to land and building leases. The spaces covered by these leases range in size from 1,700 to 10,590 square feet with the exception of our corporate headquarters which consists of approximately 53,000 square feet. Please see Note 25 “Leases” in the Consolidated Financial Statements for further information regarding the leases. Management believes these properties and facilities are adequate to meet our present and immediately foreseeable needs from a real estate perspective.

Item 3: Legal Proceedings

The Company and Republic are from time to time parties (plaintiff or defendant) to lawsuits in the normal course of business. While any litigation involves an element of uncertainty, management is of the opinion that the liability of the Company and Republic, if any, resulting from such actions will not have a material effect on the financial condition or results of operations of the Company and Republic.

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

Shares of the Company's class of common stock are listed on the Nasdaq Global Market under the symbol "FRBK." As of March 10, 2020, there were approximately 100 record holders.

Dividend Policy

The Company has not paid any cash dividends on its common stock and has no plans to pay cash dividends during 2020**.** The Company's ability to pay dividends depends primarily on receipt of dividends from the Company's subsidiary, Republic. Dividend payments from Republic are subject to legal and regulatory limitations. The ability of Republic to pay dividends is also subject to profitability, financial condition, capital expenditures and other cash flow requirements.

Item 6: Selected Financial Data

(dollars in thousands, except per share data)	As of or for the Years Ended December 31, 2019	2018	2017	2016	2015
INCOME STATEMENT DATA					
Total interest income	$ 104,864	$ 92,074	$ 70,849	$ 54,227	$ 45,436
Total interest expense	27,057	16,170	8,784	6,863	5,381
Net interest income	77,807	75,904	62,065	47,364	40,055
Provision for loan losses	1,905	2,300	900	1,557	500
Non-interest income	23,738	20,322	20,097	15,312	9,943
Non-interest expenses	104,490	83,721	75,276	56,293	47,091
Income (loss) before provision (benefit) for income taxes	(4,850)	10,205	5,986	4,826	2,407
Provision (benefit) for income taxes	(1,350)	1,578	(2,919)	(119)	(26)
Net income (loss)	$ (3,500)	$ 8,627	$ 8,905	$ 4,945	$ 2,433
PER SHARE DATA					
Basic earnings (loss) per share	$ (0.06)	$ 0.15	$ 0.16	$ 0.13	$ 0.06
Diluted earnings (loss) per share	$ (0.06)	$ 0.15	$ 0.15	$ 0.12	$ 0.06
Book value per share	$ 4.23	$ 4.17	$ 3.97	$ 3.79	$ 3.00
Tangible book value per share [1]	$ 4.15	$ 4.09	$ 3.89	$ 3.70	$ 3.00
BALANCE SHEET DATA					
Total assets	$ 3,341,290	$ 2,753,297	$ 2,322,347	$ 1,923,931	$ 1,438,824
Total loans, net	1,738,929	1,427,983	1,153,679	955,817	866,066
Total investment securities	1,186,630	1,088,331	938,561	803,604	460,131
Total deposits	2,999,163	2,392,867	2,063,295	1,677,670	1,249,298
Short-term borrowings	-	91,422	-	-	47,000
Subordinated debt	11,265	11,259	21,681	21,881	21,857
Total shareholders' equity	249,168	245,189	226,460	215,053	113,375
PERFORMANCE RATIOS					
Return on average assets	(0.12%)	0.34%	0.43%	0.30%	0.19%
Return on average shareholders' equity	(1.41%)	3.69%	4.02%	3.97%	2.14%
Net interest margin	2.85%	3.16%	3.23%	3.14%	3.29%
Total non-interest expenses as a percentage of average assets	3.51%	3.28%	3.64%	3.45%	3.59%
ASSET QUALITY RATIOS					
Allowance for loan losses as a percentage of loans	0.53%	0.60%	0.74%	0.95%	0.99%
Allowance for loan losses as a percentage of non-performing loans	74.65%	83.31%	57.93%	48.45%	68.95%
Non-performing loans as a percentage of total loans	0.71%	0.72%	1.28%	1.96%	1.44%
Non-performing assets as a percentage of total assets	0.42%	0.60%	0.94%	1.51%	1.66%
Net charge-offs as a percentage of average loans, net	0.08%	0.17%	0.13%	0.12%	0.41%
LIQUIDITY AND CAPITAL RATIOS					
Average equity to average assets	8.36%	9.16%	10.72%	7.63%	8.67%
Leverage ratio	7.83%	9.35%	10.64%	12.74%	9.65%
CET 1 capital to risk-weighted assets	11.41%	13.90%	14.75%	16.59%	10.42%
Tier 1 capital to risk-weighted assets	11.93%	14.53%	16.13%	18.28%	12.40%
Total capital to risk-weighted assets	12.37%	15.03%	16.70%	18.99%	13.19%

(1) A Non-GAAP Disclosure

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

The following discussion and analysis of the results of operations and financial condition should be read in conjunction with Item 6 "Selected Financial Data" and the consolidated financial statements and the notes thereto included in Item 8 of this report. This discussion and analysis contains forward-looking statements that involve risks, uncertainties and assumptions. Certain risks, uncertainties and other factors, including but not limited to those set forth in Item 1A, entitled, "Risk Factors" and elsewhere in this report may cause actual results to differ materially from those projected in the forward-looking statements.

Executive Summary

"The Power of Red is Back" expansion campaign continues to produce impressive results from a balance sheet perspective. During 2019 total assets grew by $588 million or 21% driven by the success of our customer centric banking philosophy of turning customers into "**FANS**". Deposit balances increased by 25% as our network of stores continues to drive new customer relationships. Loan production was also significant as outstanding balances increased by 22%.

Earnings during 2019 were negatively impacted by compression of our net interest margin caused by a flat and, at times, an inverted yield curve. The shape of the yield curve is driving lower yields on interest earning assets and higher rates on interest bearing liabilities. In the midst of this challenging interest rate environment we have also incurred costs required to expand into New York City. In addition to new hires, training, advertising, and occupancy expenses for the opening of our first two stores in New York this year, we have also established a management and lending team for this new market.

As we enter the new year, a number of cost control measures have been implemented to offset the challenges faced in growing revenue as a result of compression in the net interest margin. These measures will begin to take effect during the first quarter of 2020.

Additional highlights for the year ended December 31, 2019 were as follows:

- Total deposits increased by $606 million, or 25%, to $3.0 billion as of December 31, 2019 compared to $2.4 billion as of December 31, 2018.

- New stores opened since the beginning of the "Power of Red is Back" expansion campaign are currently growing deposits at an average rate of $30 million per year, while the average deposit growth for all stores over the last twelve months was approximately $22 million per store.

- Expansion into New York City began in 2019 with the opening of our first two stores located at the corner of 14th Street and 5th Avenue and the corner of 51st Street and 3rd Avenue.

- Total loans grew $312 million, or 22%, to $1.7 billion as of December 31, 2019 compared to $1.4 billion at December 31, 2018. The success of our relationship banking strategy continues to produce growth rates far in excess of industry standards.

- Total assets increased by $588 million, or 21%, to $3.3 billion as of December 31, 2019 compared to $2.8 billion as of December 31, 2018.

- We had twenty-nine convenient store locations open at December 31, 2019. During 2019 we celebrated the grand opening of four new stores. In addition to the two stores opened in New York City, we added locations in Lumberton, NJ and Feasterville, PA.

- A new store was opened in Northfield, NJ early in 2020. Construction on a new store in Bensalem, PA is ongoing and expected to be complete during the second quarter of 2020. There are also multiple sites in various stages of development for future store locations.

- Profitability declined during 2019. We recorded a net loss of $3.5 million, or ($0.06) per share, for the twelve months ended December 31, 2019 compared to net income of $8.6 million, or $0.15 per share for the twelve months ended December 31, 2018.

- The net interest margin decreased by 31 basis points to 2.85% for the twelve months ended December 31, 2019 compared to 3.16% for the twelve months ended December 31, 2018. Margin compression was driven by a flat and inverted yield curve experienced during 2019.

- The ratio of non-performing assets to total assets declined to 0.42% as of December 31, 2019 compared to 0.60% as of December 31, 2018. The Company was able to successfully liquidate the single largest non-performing asset on its books during the fourth quarter of 2019.

- The Company's residential mortgage division, Oak Mortgage, is serving the home financing needs of customers throughout its footprint. The Oak Mortgage team originated more than $450 million in mortgage loans during 2019.

- Meeting the needs of small business customers continued to be an important part of the Company's lending strategy. More than $55 million in new SBA loans were originated during the twelve month period ended December 31, 2019. We continue to be a top SBA lender in our market area based on the dollar volume of loan originations.

- The Total Risk-Based Capital ratio was 12.37% and Tier I Leverage Ratio was 7.83% at December 31, 2019.

- Book value per common share increased to $4.23 as of December 31, 2019 compared to $4.17 as of December 31, 2018.

Non-GAAP Based Financial Measures

Our selected financial data contains a non-GAAP financial measure calculated using non-GAAP amounts. This measure is tangible book value per common share. Tangible book value per share adjusts the numerator by the amount of Goodwill and Other Intangible Assets (as a reduction of Shareholders' Equity). Management uses non-GAAP measures to present historical periods comparable to the current period presentation. In addition, management believes the use of non-GAAP measures provides additional clarity when assessing our financial results and use of equity. Disclosures of this type should not be viewed as substitutes for results determined to be in accordance with U.S. GAAP, nor are they necessarily comparable to non-GAAP performance measures that may be presented by other entities.

The following table provides a reconciliation of tangible book value per common share as of December 31, 2019 and December 31, 2018.

(dollars in thousands)	December 31, 2019	December 31, 2018
Total shareholders' equity	$ 249,168	$ 245,189
Reconciling items:		
Goodwill	(5,011)	(5,011)
Tangible common equity	$ 244,157	$ 240,178
Common shares outstanding	58,842,778	58,789,228
Tangible book value per common share	$ 4.15	$ 4.09

Critical Accounting Policies, Judgments and Estimates

In reviewing and understanding our financial information, you are encouraged to read and understand the significant accounting policies used in preparing the consolidated financial statements. These policies are described in Note 2 – Summary of Significant Accounting Policies of the Notes to Consolidated Financial Statements. The accounting and financial reporting policies conform to accounting principles generally accepted in the United States of America and to general practices within the banking industry. The preparation of the consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Management evaluates these estimates and assumptions on an ongoing basis including those related to the allowance for loan losses, carrying values of other real estate owned, other than temporary impairment of securities, fair value of financial instruments and deferred income taxes. Management bases its estimates on historical experience and various other factors and assumptions that are believed to be reasonable under the circumstances. These form the basis for making judgments on the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

We have identified the policies related to the allowance for loan losses, other-than-temporary impairment of securities, loans receivable, mortgage loans held for sale, interest rate lock commitments, forward loan sale commitments, goodwill, other real estate owned, and deferred income taxes as being critical.

Allowance for Loan Losses - Management's ongoing evaluation of the adequacy of the allowance for loan losses is based on our past loan loss experience, the volume and composition of our lending, adverse situations that may affect a borrower's ability to repay, the estimated value of any underlying collateral, current economic conditions and other factors affecting the known and inherent risk in the portfolio. The allowance for loan losses is increased by charges to income through the provision for loan losses and decreased by charge-offs (net of recoveries). The allowance is maintained at a level that management, based upon its evaluation, considers adequate to absorb losses inherent in the loan portfolio. This evaluation is inherently subjective as it requires material estimates including, among others, the amount and timing of expected future cash flows on impacted loans, exposure at default, value of collateral, and estimated losses on our commercial and residential loan portfolios. All of these estimates may be susceptible to significant change.

The allowance consists of specific allowances for impaired loans, a general allowance on the remainder of the portfolio, and an unallocated component to account for a level of imprecision in management's estimation process. Although management determines the amount of each element of the allowance separately, the allowance for loan losses as a whole is available for the entire loan portfolio.

Management establishes an allowance on certain impaired loans for the amount by which the discounted cash flows, observable market price, or fair value of collateral if the loan is collateral dependent, is lower than the carrying value of the loan. A loan is considered to be impaired when, based upon current information and events, it is probable that we will be unable to collect all amounts due according to the contractual terms of the loan. A delay or shortfall in amount of payments does not necessarily result in the loan being identified as impaired.

Management also establishes a general allowance on non-impaired loans to recognize the inherent losses associated with lending activities, but which, unlike specific allowances, have not been allocated to particular loans. This general valuation allowance is determined by segregating the loans by loan category and assigning allowance percentages based on our historical loss experience, delinquency trends, and management's evaluation of the collectability of the loan portfolio.

Management also evaluates classified loans, which are not impaired. We segregate these loans by category and assign qualitative factors to each loan based on inherent losses associated with each type of lending and consideration that these loans, in the aggregate, represent an above-average credit risk and that more of these loans will prove to be uncollectible compared to loans in the general portfolio. Classification of a loan within this category is based on identified weaknesses that increase the credit risk of the loan.

The allowance is adjusted for significant factors that, in management's judgment, affect the collectability of the portfolio as of the evaluation date. These significant factors may include changes in lending policies and procedures, changes in existing general economic and business conditions affecting its primary lending areas, credit quality trends, collateral value, loan volumes and concentrations, seasoning of the loan portfolio, loss experience in particular segments of the portfolio, duration of the current business cycle, and bank regulatory examination results. The applied loss factors are re-evaluated each reporting period to ensure their relevance in the current economic environment.

While management uses the best information known to it in order to make loan loss allowance valuations, adjustments to the allowance may be necessary based on changes in economic and other conditions, changes in the composition of the loan portfolio, or changes in accounting guidance. In times of economic slowdown, either regional or national, the risk inherent in the loan portfolio could increase resulting in the need for additional provisions to the allowance for loan losses in future periods. An increase could also be necessitated by an increase in the size of the loan portfolio or in any of its components even though the credit quality of the overall portfolio may be improving. Historically, the estimates of the allowance for loan loss have provided adequate coverage against actual losses incurred. In addition, the Pennsylvania Department of Banking and Securities and the FDIC, as an integral part of their examination processes, periodically review the allowance for loan losses. The Pennsylvania Department of Banking and Securities or the FDIC may require the recognition of adjustment to the allowance for loan losses based on their judgment of information available to them at the time of their examinations. To the extent that actual outcomes differ from management's estimates, additional provisions to the allowance for loan losses may be required that would adversely impact earnings in future periods.

Other-Than-Temporary Impairment of Securities - Securities are evaluated on at least a quarterly basis, and more frequently when market conditions warrant such an evaluation, to determine whether a decline in their value is other-than-temporary. To determine whether a loss in value is other-than-temporary, management utilizes criteria such as the reasons underlying the decline, the magnitude and duration of the decline and our intent and ability to retain its investment in the security for a period of time sufficient to allow for an anticipated recovery in the fair value. The term "other-than-temporary" is not intended to indicate that the decline is permanent, but indicates that the prospects for a near-term recovery of value is not necessarily favorable, or that there is a lack of evidence to support a realizable value equal to or greater than the carrying value of the investment. Once a decline in value is determined to be other-than-temporary, the value of the security is reduced and a corresponding charge to earnings is recognized.

Mortgage Banking Activities and Mortgage Loans Held for Sale ‑ Mortgage loans held for sale are originated and held until sold to permanent investors. Management elected to adopt the fair value option in accordance with FASB Accounting Standards Codification ("ASC") 820, *Fair Value Measurements and Disclosures*, and record loans held for sale at fair value.

Mortgage loans held for sale originated on or subsequent to the election of the fair value option, are recorded on the balance sheet at fair value. The fair value is determined on a recurring basis by utilizing quoted prices from dealers in such securities. Changes in fair value are reflected in mortgage banking income in the statements of income. Direct loan origination costs are recognized when incurred and are included in non-interest expense in the statements of income.

Interest Rate Lock Commitments - Mortgage loan commitments known as interest rate locks that relate to the origination of a mortgage that will be held for sale upon funding are considered derivative instruments under the derivatives and hedging accounting guidance FASB ASC 815, *Derivatives and Hedging*. Loan commitments that are classified as derivatives are recognized at fair value on the balance sheet as other assets and other liabilities with changes in their fair values recorded as mortgage banking income and included in non-interest income in the statements of income. Outstanding IRLCs are subject to interest rate risk and related price risk during the period from the date of issuance through the date of loan funding, cancellation or expiration. Loan commitments generally range between 30 and 90 days; however, the borrower is not obligated to obtain the loan. Republic is subject to fallout risk related to IRLCs, which is realized if approved borrowers choose not to close on the loans within the terms of the IRLCs. Republic uses best efforts commitments to substantially eliminate these risks. The valuation of the IRLCs issued by Republic includes the value of the servicing released premium. Republic sells loans servicing released, and the servicing released premium is included in the market price. See Note 23 Derivatives and Risk Management Activities for further detail on IRLCs.

Forward Loan Sale Commitments - Forward loan sale commitments are commitments to sell individual mortgage loans at a fixed price to an investor at a future date. Forward loan sale commitments are accounted for as derivatives and carried at fair value, determined as the amount that would be necessary to settle the derivative financial instrument at the balance sheet date. Gross derivative assets and liabilities are recorded as other assets and other liabilities with changes in fair value during the period recorded as mortgage banking income and included in non-interest income in the statements of income.

Goodwill - Goodwill represents the excess of cost over the identifiable net assets of businesses acquired. Goodwill is recognized as an asset and is to be reviewed for impairment annually. The Company completed an annual impairment test for goodwill as of July 31, 2019 and 2018. Future impairment testing will be conducted each year as of July 31, unless a triggering event occurs in the interim that would suggest impairment, in which case it would be tested as of the date of the triggering event. During the twelve months ended December 31, 2019 and 2018, there was no goodwill impairment recorded. There can be no assurance that future impairment assessments or tests will not result in a charge to earnings. There was $5.0 million of goodwill at December 31, 2019 and 2018.

Other Real Estate Owned - Other real estate owned consists of assets acquired through, or in lieu of, loan foreclosure. They are held for sale and are initially recorded at fair value less cost to sell at the date of foreclosure, establishing a new cost basis. Subsequent to foreclosure, valuations are periodically performed by management and the assets are carried at the lower of carrying amount or fair value, less the cost to sell. Revenue and expenses from operations and changes in the valuation allowance are included in net expenses from other real estate owned.

Income Taxes - Management makes estimates and judgments to calculate various tax liabilities and determine the recoverability of various deferred tax assets, which arise from temporary differences between the tax and financial statement recognition of revenues and expenses. Management also estimates a reserve for deferred tax assets if, based on the available evidence, it is more likely than not that some portion or all of the recorded deferred tax assets will not be realized in future periods. These estimates and judgments are inherently subjective. Historically, management's estimates and judgments to calculate the deferred tax accounts have not required significant revision.

In evaluating our ability to recover deferred tax assets, management considers all available positive and negative evidence, including the past operating results and forecasts of future taxable income. In determining future taxable income, management makes assumptions for the amount of taxable income, the reversal of temporary differences and the implementation of feasible and prudent tax planning strategies. These assumptions require management to make judgments about the future taxable income and are consistent with the plans and estimates used to manage the business. Any reduction in estimated future taxable income may require management to record a valuation allowance against the deferred tax assets. An increase in the valuation allowance would result in additional income tax expense in the period and could have a significant impact on future earnings.

Results of Operations

For the year ended December 31, 2019 as compared to the year ended December 31, 2018

We reported a net loss of $3.5 million, or ($0.06) per diluted share, for the twelve months ended December 31, 2019 compared to net income of $8.6 million, or $0.15 per diluted share, for the twelve months ended December 31, 2018. Earnings in 2019 were negatively impacted by compression of the net interest margin caused by a flat and inverted yield curve which drove lower yields on interest earning assets and higher rates on interest bearing liabilities. In the midst of this challenging rate environment we have also incurred costs to execute our expansion strategy in New York City. In addition to new hires, training, advertising, and occupancy expenses related to the opening of our first two stores in New York, we also established a management and lending team for this new market.

Net interest income for the twelve months ended December 31, 2019 increased $1.9 million to $77.8 million as compared to $75.9 million for the twelve months ended December 31, 2018. Total assets grew by $588 million, or 21%, during 2019 to $3.3 billion. However, growth in net interest income of $8.8 million driven by the increase in interest earning assets was offset by a decrease of $6.9 million as a result of interest rate changes resulting in a net increase of only $1.9 million in net interest income. For comparison purposes net interest income increased by $13.5 million during 2018 on growth in assets of $431 million. Interest income increased $12.8 million, or 14%, due primarily to an increase in average interest-earning assets, primarily loans receivable. Interest expense increased $10.9 million, or 67%, primarily due to an increase in the rate on average interest-bearing liabilities and average deposit balances. The net interest margin decreased by 31 basis points to 2.85% during the twelve months ended December 31, 2019 compared to 3.16% during the twelve months ended December 31, 2018.

We recorded a loan loss provision in the amount of $1.9 million, a decrease of $395,000 for the twelve months ended December 31, 2019 compared to a provision of $2.3 million during the twelve months ended December 31, 2018. The provision recorded for the twelve months ended December 31, 2019 is charged to operations in an amount necessary to bring the total allowance for loan losses to a level that management believes is adequate to absorb inherent losses in the loan portfolio. The decrease in the provision year over year was primarily a result of a decrease in the allowance required for loans individually evaluated for impairment during 2019 and is supported by the steady decline in the ratio of non-performing assets to total assets.

Non-interest income increased $3.4 million to $23.7 million during the twelve months ended December 31, 2019 as compared to $20.3 million during the twelve months ended December 31, 2018. The increase was primarily driven by higher service fees on deposit accounts and gains on sale of investment securities during the twelve months ended December 31, 2019.

Non-interest expenses increased $20.8 million to $104.5 million during the twelve months ended December 31, 2019 as compared to $83.7 million during the twelve months ended December 31, 2018. The increase was primarily driven by higher salaries, employee benefits, occupancy, and equipment expenses associated with the addition of new stores related to our expansion strategy which we refer to as "The Power of Red is Back".

Return on average assets and average equity were (0.12%) and (1.41%), respectively, during the twelve months ended December 31, 2019 compared to 0.34% and 3.69%, respectively, for the twelve months ended December 31, 2018.

Average Balances and Net Interest Income

Historically, our earnings have depended primarily upon Republic's net interest income, which is the difference between interest earned on interest-earning assets and interest paid on interest-bearing liabilities. Net interest income is affected by changes in the mix of the volume and rates of interest-earning assets and interest-bearing liabilities. The following table provides an analysis of net interest income on an annualized basis, setting forth for the periods average assets, liabilities, and shareholders' equity, interest income earned on interest-earning assets and interest expense on interest-bearing liabilities, average yields earned on interest-earning assets and average rates on interest-bearing liabilities, and Republic's net interest margin (net interest income as a percentage of average total interest-earning assets). Averages are computed based on daily balances. Non-accrual loans are included in average loans receivable. Yields are adjusted for tax equivalency, a non-GAAP measure, using a rate of 21% in 2019, 21% in 2018, and 35% in 2017.

Average Balances and Net Interest Income

	For the Year Ended December 31, 2019			For the Year Ended December 31, 2018			For the Year Ended December 31, 2017		
(dollars in thousands)	Average Balance	Interest Income/ Expense	Yield/ Rate[1]	Average Balance	Interest Income/ Expense	Yield/ Rate[1]	Average Balance	Interest Income/ Expense	Yield/ Rate[1]
Interest-earning assets:									
Federal funds sold and other interest earning assets	$ 129,528	$ 2,571	1.98%	$ 40,931	$ 847	2.07%	$ 48,148	$ 577	1.20%
Investment securities and restricted stock	1,074,706	27,886	2.59%	1,037,810	27,316	2.63%	811,269	20,466	2.52%
Loans receivable	1,544,904	74,946	4.85%	1,340,117	64,455	4.81%	1,090,851	50,687	4.65%
Total interest-earning assets	2,749,138	105,403	3.83%	2,418,858	92,618	3.83%	1,950,268	71,730	3.68%
Other assets	229,767			131,369			115,770		
Total assets	$ 2,978,905			$ 2,550,227			$ 2,066,038		
Interest bearing liabilities:									
Demand – non-interest bearing	$ 555,385			$ 488,995			$ 372,171		
Demand – interest bearing	1,184,530	15,621	1.32%	918,508	7,946	0.87%	687,586	3,020	0.44%
Money market & savings	705,445	6,796	0.96%	697,135	4,898	0.70%	629,464	3,160	0.50%
Time deposits	190,567	3,850	2.02%	128,892	1,588	1.23%	110,952	1,238	1.12%
Total deposits	2,635,927	26,267	1.00%	2,233,530	14,432	0.65%	1,800,173	7,418	0.41%
Total interest bearing deposits	2,080,542	26,267	1.26%	1,744,535	14,432	0.83%	1,428,002	7,418	0.52%
Other borrowings	22,911	790	3.45%	73,573	1,738	2.36%	35,429	1,366	3.86%
Total interest-bearing liabilities	2,103,453	27,057	1.29%	1,818,108	16,170	0.89%	1,463,431	8,784	0.60%
Total deposits and other borrowings	2,658,838	27,057	1.02%	2,307,103	16,170	0.70%	1,835,602	8,784	0.48%
Non-interest bearing other liabilities	71,131			9,431			8,942		
Shareholders' equity	248,936			233,693			221,494		
Total liabilities and shareholders' equity	$ 2,978,905			$ 2,550,227			$ 2,066,038		
Net interest income[2]		$ 78,346			$ 76,448			$ 62,946	
Net interest spread			2.54%			2.94%			3.08%
Net interest margin[2]			2.85%			3.16%			3.23%

(1) Yields on investments are calculated based on amortized cost.

(2) Net interest income and net interest margin are presented on a tax equivalent basis, a Non-GAAP measure. Net interest income has been increased over the financial statement amount by $539, $544, and $881 in 2019, 2018, and 2017, respectively, to adjust for tax equivalency. The tax equivalent net interest margin is calculated by dividing tax equivalent net interest income by average total interest earning assets.

Rate/Volume Analysis of Changes in Net Interest Income

Net interest income may also be analyzed by segregating the volume and rate components of interest income and interest expense. The following table sets forth an analysis of volume and rate changes in net interest income for the periods indicated. For purposes of this table, changes in interest income and expense are allocated to volume and rate categories based upon the respective changes in average balances and average rates. Net interest income and net interest margin are presented on a tax equivalent basis, a Non-GAAP measure.

	Year ended December 31, 2019 vs. 2018			Year ended December 31, 2018 vs. 2017		
	Changes due to:			Changes due to:		
(dollars in thousands)	Average Volume	Average Rate	Total Change	Average Volume	Average Rate	Total Change
Interest earned:						
Federal funds sold and other interest-earning assets	$ 1,759	$ (35)	$ 1,724	$ (149)	$ 419	$ 270
Securities	958	(388)	570	5,963	887	6,850
Loans	9,439	1,052	10,491	11,596	2,172	13,768
Total interest-earning assets	12,156	629	12,785	17,410	3,478	20,888
Interest expense:						
Deposits						
Interest-bearing demand deposits	$ 3,508	$ 4,167	$ 7,675	$ 1,998	$ 2,928	$ 4,926
Money market and savings	46	1,852	1,898	516	1,222	1,738
Time deposits	1,246	1,016	2,262	221	129	350
Total deposit interest expense	4,800	7,035	11,835	2,735	4,279	7,014
Other borrowings	(1,402)	454	(948)	742	(370)	372
Total interest expense	3,398	7,489	10,887	3,477	3,909	7,386
Net interest income	$ 8,758	$ (6,860)	$ 1,898	$ 13,933	$ (431)	$ 13,502

Net Interest Income and Net Interest Margin

Net interest income, on a fully tax-equivalent basis, a non-GAAP measure, for the twelve months ended December 31, 2019 increased by $1.9 million, or 2%, over twelve months ended December 31, 2018. Interest income on interest-earning assets totaled $105.4 million for the twelve months ended December 31, 2019, an increase of $12.8 million, compared to $92.6 million for the twelve months ended December 31, 2018. The increase in interest income earned was primarily the result of an increase in average interest-earning balances, primarily loans receivable. Total interest expense for the twelve months ended December 31, 2019 increased $10.9 million, or 67%, to $27.1 million from $16.2 million for the twelve months ended December 31, 2018. Interest expense on deposits increased by $11.8 million, or 82%, for the twelve months ended December 31, 2019 versus the twelve months ended December 31, 2018 due to higher rates and increases in average deposit balances. Interest expense on other borrowings decreased by $948,000 for the twelve months ended December 31, 2019 compared to the twelve months ended December 31, 2018 due primarily to a $48.2 million decrease in average overnight borrowings.

Changes in net interest income are frequently measured by two statistics: net interest rate spread and net interest margin. Net interest rate spread is the difference between the average rate earned on interest-earning assets and the average rate incurred on interest-bearing liabilities. Our net interest rate spread on a fully tax-equivalent basis was 2.54% during the twelve months ended December 31, 2019 versus 2.94% during the twelve months ended December 31, 2018. Net interest margin represents the difference between interest income, including net loan fees earned, and interest expense, reflected as a percentage of average interest-earning assets. For the twelve months ended December 31, 2019 and 2018, the fully tax-equivalent net interest margin was 2.85% and 3.16%, respectively. Compression in the net interest margin was driven by flattening of the yield curve resulting in a more rapid increase in our cost of funds compared to the yield on interest earning assets.

Provision for Loan Losses

We recorded a provision for loan losses in the amount of $1.9 million, a decrease of $395,000, for the twelve months ended December 31, 2019 compared to a $2.3 million provision for the twelve months ended December 31, 2018. The provision for loan losses is charged to operations in an amount necessary to bring the total allowance for loan losses to a level that management believes is adequate to absorb inherent losses in the loan portfolio. The provision recorded for the twelve months ended December 31, 2019 compared to the twelve months ended December 31, 2018 decreased primarily as a result of a decrease in the allowance required for loans individually evaluated for impairment. Non-performing assets as a percentage of total assets declined to 0.42% as of December 31, 2019 compared to 0.60% as of December 31, 2018. This is the fifth consecutive year that this ratio has declined. Net charge-offs as a percentage of average loans also declined during 2019.

Non-Interest Income

Total non-interest income for the twelve months ended December 31, 2019 increased by $3.4 million, or 17%, compared to the twelve months ended December 31, 2018. Service fees on deposit accounts totaled $7.5 million for the twelve months ended December 31, 2019 which represents an increase of $2.1 million compared to the twelve months ended December 31, 2018. This increase was driven by growth in customer deposit accounts and transaction volume. We recognized gains of $1.1 million on the sale of securities during the twelve months ended December 31, 2019, an increase of $1.2 million, compared to losses of $67,000 on the sales of securities for the twelve months ended December 31, 2018. Loan and servicing fees totaled $1.6 million for the twelve months ended December 31, 2019 which represents an increase of $167,000 compared to the twelve months ended December 31, 2018. Gains on the sale of SBA loans totaled $3.2 million for the twelve months ended December 31, 2019, an increase of $82,000, versus $3.1 million for the twelve months ended December 31, 2018. Mortgage banking income totaled $10.1 million and $10.2 million for the twelve months ended December 31, 2019 and 2018.

Non-Interest Expenses

Non-interest expenses increased by $20.8 million, or 25%, for the twelve months ended December 31, 2019, compared to the twelve months ended December 31, 2018. An explanation of changes of non-interest expenses for certain categories is presented in the following paragraphs.

Salary expenses and employee benefits for the twelve months ended December 31, 2019 increased by $9.8 million, or 22%, compared to the twelve months ended December 31, 2018. The increase was primarily driven by annual merit increases along with increased staffing levels related to our growth strategy of adding and relocating stores, which we refer to as “The Power of Red is Back”. There were twenty-nine stores open as of December 31, 2019 compared to twenty-five stores open at December 31, 2018. The strategic decision to expand into New York City was also a significant factor driving the increase in salaries and employee benefits.

Occupancy expense, including depreciation and amortization expense, increased by $4.6 million, or 34%, for the twelve months ended December 31, 2019 compared to the twelve months ended December 31, 2018, also as a result of our continuing growth and expansion strategy.

Other real estate owned expenses totaled $2.1 million during the twelve months ended December 31, 2019, an increase of $521,000, when compared to the twelve months ended December 31, 2018. This increase was a result of higher costs to carry foreclosed properties on foreclosed assets during the twelve months ended December 31, 2019.

All other non-interest expenses for the twelve months ended December 31, 2019 increased $5.8 million compared to the twelve months ended December 31, 2018. Increases in expenses related to data processing, advertising, automated teller machine expenses, and professional fees were mainly associated with our growth strategy.

One key measure that management utilizes to monitor progress in controlling overhead expenses is the ratio of annualized net non-interest expenses to average assets, a non-GAAP measure. For purposes of this calculation, net non-interest expenses equal non-interest expenses less non-interest income. For the twelve months ended December 31, 2019, the ratio equaled 2.71% compared to 2.49% for the twelve months ended December 31, 2018, respectively. The increase in this ratio was mainly due to our growth and expansion strategy which drives the addition of new stores, along with additional employees to support the growth strategy.

Another productivity measure utilized by management is the operating efficiency ratio, another non-GAAP measure. This ratio expresses the relationship of non-interest expenses to net interest income plus non-interest income. The efficiency ratio equaled 102.90% for the twelve months ended December 31, 2019, compared to 87.0% for the twelve months ended December 31, 2018. The increase for the twelve months ended December 31, 2019 versus the twelve months ended December 31, 2018 was due to non-interest expenses increasing at a faster rate than net interest income and non-interest income.

Provision (Benefit) for Income Taxes

We recorded a benefit for income taxes of $1.4 million for the twelve months ended December 31, 2019 compared to a provision of $1.6 million for the twelve months ended December 31, 2018. The effective tax rates for the twelve month periods ended December 31, 2019 and 2018 were (28%) and 15%, respectively. The effect of permanent deductions increases the effective tax benefit percentage when in a pre-tax loss position and decreases the effective tax rate when in a pre-tax income position.

We evaluate the carrying amount of our deferred tax assets on a quarterly basis or more frequently, if necessary, in accordance with the guidance provided in Financial Accounting Standards Board (FASB) Accounting Standards Codification Topic 740 (ASC 740), in particular, applying the criteria set forth therein to determine whether it is more likely than not (i.e. a likelihood of more than 50%) that some portion, or all, of the deferred tax asset will not be realized within its life cycle, based on the weight of available evidence. If management makes a determination based on the available evidence that it is more likely than not that some portion or all of the deferred tax assets will not be realized in future periods, a valuation allowance is calculated and recorded. These determinations are inherently subjective and dependent upon estimates and judgments concerning management's evaluation of both positive and negative evidence.

In conducting the deferred tax asset analysis, we believe it is important to consider the unique characteristics of an industry or business. In particular, characteristics such as business model, level of capital and reserves held by a financial institution and the ability to absorb potential losses are important distinctions to be considered for bank holding companies like us. In addition, it is also important to consider that net operating loss carryforwards ("NOLs") calculated for federal income tax purposes can generally be carried back two years and carried forward for a period of twenty years, for NOLs created prior to January 1,

2018. Federal NOLs generated after December 31, 2017 can be carried forward indefinitely. In order to realize our deferred tax assets, we must generate sufficient taxable income in such future years.

In assessing the need for a valuation allowance, the Company carefully weighed both positive and negative evidence currently available. Judgment is required when considering the relative impact of such evidence. The weight given to the potential effect of positive and negative evidence must be commensurate with the extent to which it can be objectively verified.

The Company is in a 3-year cumulative profit position factoring in pre-tax GAAP income and permanent book/tax differences. Strong growth in interest-earning assets is expected to continue and is supported by the capital raise completed at the end of 2016. The ratio of non-performing assets to total assets along with other credit quality metrics continue to improve. A number of cost control measures have been implemented to offset the challenges faced in growing revenue as a result of compression in the net interest margin. The Company has added 10 store locations in the past 3 years and since the inception of the "Power of Red is Back" growth and expansion strategy in 2014 almost every new store location has met or exceeded expectations. The success of the expansion into New York, combined with the stabilization of interest rates and continued loan growth are expected to improve profitability going forward.

Conversely, the Company generated a loss in the current year when factoring in pre-tax GAAP income and permanent book/tax differences. The Bank's net interest margin declined during 2019 as a result of the challenging interest rate environment which appears to be consistent across the financial services industry. Non-accrual loans increased by 20 percent during 2019. Rising interest rates and a downturn in the economy could significantly decrease the volume of mortgage loan originations.

The Company has experienced a growing balance sheet driven by the growth and expansion strategy over the last several years. Loans and deposits have consistently grown at rates far above industry standards generating a higher level of interest earning assets. Assets quality metrics have improved to levels not seen in more than 20 years. From 2014 to 2018, the Company demonstrated consistent and steady improvement in earnings despite the investments required to initiate the expansion plan which put it in a position to comfortably rely on projections of future taxable income when evaluating the need for a valuation allowance against its deferred tax assets for the years ended December 31, 2018 and 2017.

In 2019, the Company began opening branches in New York City. Management was aware of the initial costs and investments required to expand into this new market. As a result of the flat and inverted yield curve experienced in 2019, the net interest margin compressed and revenue did not grow at the rate necessary to support the increased expense levels which caused a decline in earnings. Management and the Board of Directors have engaged in detailed discussions on how to improve profitability going forward. During the preparation of the 2020 budget, several cost reduction and control initiatives were identified and incorporated into the projections. These initiatives include, but are not limited to, a reduction of store hours and slowing of the number of locations to be opened in the coming years. Efforts to reduce high cost deposits and increase loan production to improve the net interest margin have also been initiated. The Company's multi-year budget plan projects future taxable income will be more than sufficient to support the realization of the deferred tax assets.

Based on the guidance provided in FASB Accounting Standards Codification Topic 740 (ASC 740), the Company believed that the positive evidence considered at December 31, 2019 outweighed the negative evidence and that it was more likely than not that all of the Company's deferred tax assets would be realized within their life cycle. Therefore, a valuation allowance was not required at December 31, 2019.

The net deferred tax asset balance was $12.6 million as of December 31, 2019, $12.3 million as of December 31, 2018, and $12.7 million as of December 31, 2017. The deferred tax asset will continue to be analyzed on a quarterly basis for changes affecting realizability.

Net Income and Net Income per Common Share

The net loss for the twelve months ended December 31, 2019 was $3.5 million, compared to net income of $8.6 million for the twelve months ended December 31, 2018. For the twelve months ended December 31, 2019, basic and fully-diluted net loss per common share was ($0.06), compared to basic and fully-diluted net income per common share of $0.15, respectively for the twelve months ended December 31, 2018.

Return on Average Assets and Average Equity

Return on average assets (ROA) measures our net income in relation to our total average assets. The ROA for the twelve months ended December 31, 2019 and 2018 was (0.12%) and 0.34%, respectively. Return on average equity (ROE) indicates how effectively we can generate net income on the capital invested by our stockholders. ROE is calculated by dividing annualized net income by average stockholders' equity. The ROE for the twelve months ended December 31, 2019 was (1.41%), compared to 3.69% for the twelve months ended December 31, 2018.

Results of Operations

For the year ended December 31, 2018 as compared to the year ended December 31, 2017

We reported net income of $8.6 million, or $0.15 per diluted share, for the twelve months ended December 31, 2018 compared to net income of $8.9 million, or $0.15 per diluted share, for the twelve months ended December 31, 2017. The decrease in net income of $278,000 was related to an increase in total non-interest expense and the provision for income taxes partially offset by an increase in net interest income and non-interest income. Net income before tax grew by 70%, or $4.2 million to $10.2 million for the twelve months December 31, 2018 compared to net income before tax of $6.0 million for the twelve months ended December 31, 2017.

Net interest income for the twelve months ended December 31, 2018 increased $13.8 million to $75.9 million as compared to $62.1 million for the twelve months ended December 31, 2017. Interest income increased $21.2 million, or 30.0%, due primarily to an increase in average loans receivable and investment securities balances. Interest expense increased $7.4 million, or 84.1%, primarily due to an increase in the cost of average interest-bearing liabilities and the balance of average interest-bearing liabilities. The increase in interest rates associated with the cost of interest-bearing liabilities was mainly driven by the increases in the Fed Funds rate during 2018.

We recorded a loan loss provision in the amount of $2.3 million, an increase of $1.4 million for the twelve months ended December 31, 2018 compared to a provision of $900,000 during the twelve months ended December 31, 2017. The higher provision recorded for the twelve months ended December 31, 2018 is charged to operations in an amount necessary to bring the total allowance for loan losses to a level that management believes is adequate to absorb inherent losses in the loan portfolio. The increase was primarily a result of an increase in the allowance required for loans collectively evaluated for impairment due to growth in outstanding loans during 2018.

Non-interest income increased $225,000 to $20.3 million during the twelve months ended December 31, 2018 as compared to $20.1 million during the twelve months ended December 31, 2017. The increase was primarily driven by service fees on deposit accounts, partially offset by a decrease in mortgage banking income, gains on the sale of SBA loans, and loan and servicing fees recorded during the twelve months ended December 31, 2017.

Non-interest expenses increased $8.4 million to $83.7 million during the twelve months ended December 31, 2018 as compared to $75.3 million during the twelve months ended December 31, 2017. The increase was primarily driven by higher salaries, employee benefits, occupancy and equipment expenses associated with the addition of new stores related to our expansion strategy which we refer to as "The Power of Red is Back".

Return on average assets and average equity were 0.34% and 3.69%, respectively, during the twelve months ended December 31, 2018 compared to 0.43% and 4.02%, respectively, for the twelve months ended December 31, 2017.

Net Interest Income and Net Interest Margin

Net interest income, on a fully tax-equivalent basis, a non-GAAP measure, for the twelve months ended December 31, 2018 increased by $13.5 million, or 21.5%, over twelve months ended December 31, 2017. Interest income on interest-earning assets totaled $92.6 million for the twelve months ended December 31, 2018, an increase of $20.9 million, compared to $71.7 million for the twelve months ended December 31, 2017. The increase in interest income earned was primarily the result of an increase in the average balances of loans receivable and investment securities. Total interest expense for the twelve months ended December 31, 2018 increased $7.4 million, or 84.1%, to $16.2 million from $8.8 million for the twelve months ended December 31, 2017. Interest expense on deposits increased by $7.0 million, or 94.6%, for the twelve months ended December 31, 2018 versus the twelve months ended December 31, 2017 due to increases in average deposit balances and higher rates. Interest expense on other borrowings increased by $372,000 for the twelve months ended December 31, 2018 compared to the twelve months ended December 31, 2017 due primarily to a $46.1 million increase in average overnight borrowings balances.

Changes in net interest income are frequently measured by two statistics: net interest rate spread and net interest margin. Net interest rate spread is the difference between the average rate earned on interest-earning assets and the average rate incurred on interest-bearing liabilities. Our net interest rate spread on a fully tax-equivalent basis was 2.94% during the twelve months ended December 31, 2018 versus 3.08% during the twelve months ended December 31, 2017. Net interest margin represents the difference between interest income, including net loan fees earned, and interest expense, reflected as a percentage of average interest-earning assets. For the twelve months ended December 31, 2018 and 2017, the fully tax-equivalent net interest margin was 3.16% and 3.23%, respectively. The net interest margin for the twelve months ended December 31, 2018 decreased primarily as a result of the cost of funds associated with interest-bearing liabilities rising at a faster rate than the yield earned on interest-earning assets.

Provision for Loan Losses

We recorded a provision for loan losses in the amount of $2.3 million, an increase of $1.4 million, for the twelve months ended December 31, 2018 compared to a $900,000 provision for the twelve months ended December 31, 2017. The provision for loan losses is charged to operations in an amount necessary to bring the total allowance for loan losses to a level that management believes is adequate to absorb inherent losses in the loan portfolio. The provision recorded for the twelve months ended December 31, 2018 as compared to the twelve months ended December 31, 2017 increased primarily as a result of an increase in the allowance required for loans collectively evaluated for impairment driven by an increase in loans receivable.

Non-Interest Income

Total non-interest income for the twelve months ended December 31, 2018 increased by $225,000, or 1.1%, compared to the twelve months ended December 31, 2017. Service fees on deposit accounts totaled $5.5 million for the twelve months ended December 31, 2018 which represents an increase of $1.6 million compared to the twelve months ended December 31, 2017. This increase was driven by growth in customer deposit accounts and transaction volume. We recognized losses of $67,000 on the sale of securities during the twelve months ended December 31, 2018, a decrease of $79,000, compared to losses of $146,000 on the sales of securities for the twelve months ended December 31, 2017. Mortgage banking income totaled $10.2 million and $11.2 million for the twelve months ended December 31, 2018 and 2017. The decrease of $937,000 is primarily driven by fair adjustments on loans held for sale and IRLCs. Gains on the sale of SBA loans totaled $3.1 million for the twelve months ended December 31, 2018, a decrease of $273,000, versus $3.4 million for the twelve months ended December 31, 2017.

Non-Interest Expenses

Non-interest expenses increased by $8.4 million, or 11.2%, for the twelve months ended December 31, 2018, compared to the twelve months ended December 31, 2017. An explanation of changes of non-interest expenses for certain categories is presented in the following paragraphs.

Salary expenses and employee benefits for the twelve months ended December 31, 2018 increased by $6.1 million, or 16.1%, compared to the twelve months ended December 31, 2017. The increase was primarily driven by annual merit increases along with increased staffing levels related to our growth strategy of adding and relocating stores, which we refer to as "The Power of Red is Back". There were twenty-five stores open as of December 31, 2018 compared to twenty-two stores open at December 31, 2017.

Occupancy expense, including depreciation and amortization expense, increased by $1.7 million, or 14.6%, for the twelve months ended December 31, 2018 compared to the twelve months ended December 31, 2017, also as a result of our continuing growth and expansion strategy.

Other real estate owned expenses totaled $1.6 million during the twelve months ended December 31, 2018, a decrease of $2.5 million, when compared to the twelve months ended December 31, 2017. This decrease was primarily due to the writedown of a single OREO property in the amount of $2.7 million during 2017. This writedown was driven by our decision to aggressively pursue a resolution for our largest non-performing asset.

All other non-interest expenses for the twelve months ended December 31, 2018 increased $3.1 million compared to the twelve months ended December 31, 2017. Increases in expenses related to data processing, automated teller machine expenses, professional fees, and regulatory assessments which were mainly associated with our growth strategy.

One key measure that management utilizes to monitor progress in controlling overhead expenses is the ratio of annualized net non-interest expenses to average assets, a non-GAAP measure. For purposes of this calculation, net non-interest expenses equal non-interest expenses less non-interest income. For the twelve months ended December 31, 2018, the ratio equaled 2.49% compared to 2.67% for the twelve months ended December 31, 2017, respectively. The decrease in this ratio was mainly due to our growth in average assets.

Another productivity measure utilized by management is the operating efficiency ratio, another non-GAAP measure. This ratio expresses the relationship of non-interest expenses to net interest income plus non-interest income. The efficiency ratio equaled 87.0% for the twelve months ended December 31, 2018, compared to 91.6% for the twelve months ended December 31, 2017. The decrease for the twelve months ended December 31, 2018 versus the twelve months ended December 31, 2017 was due to net interest income increasing at a faster rate than non-interest expenses.

Provision (Benefit) for Income Taxes

We recorded a provision for income taxes of $1.6 million for the twelve months ended December 31, 2018, an increase of $4.2 million, compared to a benefit of $2.9 million for the twelve months ended December 31, 2017. We began recognizing an increased provision for federal and state income taxes during the first quarter of 2018 after reversing our deferred tax asset valuation allowance during the fourth quarter of 2017. We initially recorded a deferred tax asset valuation allowance in 2011 and continued to carry this allowance after determining that some portion of the deferred tax asset balance may not be realized within its life cycle based on the weight of available evidence. Adjustments to the valuation allowance resulted in the recognition of a minimal provision for income taxes in each period until its reversal in 2017. The effective tax rates for the twelve month periods ended December 31, 2018 and 2017 were 15% and 27%, respectively. The effective tax rate for December 31, 2017 excluded the adjustment to the deferred tax asset valuation allowance and offsets for the impact of the new tax legislation.

Net Income and Net Income per Common Share

Net income for the twelve months ended December 31, 2018 was $8.6 million, a decrease of $278,000, compared to $8.9 million for the twelve months ended December 31, 2017. For the twelve months ended December 31, 2018, basic and fully-diluted net income per common share was $0.15, compared to basic and fully-diluted net income per common share of $0.16 and $0.15, respectively for the twelve months ended December 31, 2017.

Return on Average Assets and Average Equity

Return on average assets (ROA) measures our net income in relation to our total average assets. The ROA for the twelve months ended December 31, 2018 and 2017 was 0.34% and 0.43%, respectively. Return on average equity (ROE) indicates how effectively we can generate net income on the capital invested by our stockholders. ROE is calculated by dividing annualized net income by average stockholders' equity. The ROE for the twelve months ended December 31, 2018 was 3.69%, compared to 4.02% for the twelve months ended December 31, 2017.

Financial Condition

December 31, 2019 compared to December 31, 2018

Total assets increased by $588 million to $3.3 billion at December 31, 2019, compared to $2.8 billion at December 31, 2018.

Cash and Cash Equivalents

Cash and due from banks and interest bearing deposits comprise this category, which consists of our most liquid assets. The aggregate amount in these three categories increased by $95.8 million to $168.3 million at December 31, 2019, from $72.5 million at December 31, 2018.

Loans Held for Sale

Loans held for sale are comprised of loans guaranteed by the U.S. Small Business Administration ("SBA") which we usually originate with the intention of selling in the future and residential mortgage loans, which we also intend to sell in the future. Total SBA loans held for sale were $3.0 million at December 31, 2019, a decrease of $2.4 million, compared to $5.4 million at December 31, 2018. Residential mortgage loans held for sale totaled $10.3 million at December 31, 2019, a decrease of $10.5 million, versus $20.9 million at December 31, 2018. Loans held for sale, as a percentage of our total assets, were less than 1% at December 31, 2019.

Loans Receivable

The loan portfolio represents our largest asset category and is our most significant source of interest income. Our lending strategy is focused on small and medium sized businesses and professionals that seek highly personalized banking services. The loan portfolio consists of secured and unsecured commercial loans including commercial real estate, construction loans, residential mortgages, home improvement loans, home equity loans and lines of credit, overdraft lines of credit, and others. Commercial loans typically range between $250,000 and $5,000,000 but customers may borrow significantly larger amounts up to our legal lending limit to a customer, which was approximately $38.2 million at December 31, 2019. Loans made to one individual customer, even if secured by different collateral, are aggregated for purposes of the lending limit. There were no loans in excess of the legal lending limit at December 31, 2018. A $25.4 million threshold, which amounts to approximately 10% of total regulatory capital, reflects an additional internal monitoring guideline. We had one loan relationship in excess of $25.4 million at December 31, 2019 that amounted to $28.0 million.

Loans increased $310.9 million, or 22%, to $1.7 billion at December 31, 2019, versus $1.4 billion at December 31, 2018. This growth was the result of an increase in loan demand in all loan categories driven by the successful execution of our relationship banking strategy which focuses on customer service.

Investment Securities

Investment securities considered available-for-sale are investments that may be sold in response to changing market and interest rate conditions, and for liquidity and other purposes. Our investment securities classified as available-for-sale consist primarily of U.S. Government agency Small Business Administration ("SBA") bonds, U.S. Government agency collateralized mortgage obligations ("CMO"), agency mortgage-backed securities ("MBS"), municipal securities, and corporate bonds. Available-for-sale securities totaled $539.0 million at December 31, 2019 as compared to $321.0 million at December 31, 2018. The $218.0 million increase was primarily due to the purchase of securities totaling $338.5 million partially offset by sales, paydowns, maturities, and calls of securities totaling $122.7 million by during 2019. At December 31, 2019, the portfolio had a net unrealized loss of $1.7 million compared to a net unrealized loss of $5.7 million at December 31, 2018. The $4.0 million decrease in the unrealized loss of the investment portfolio was driven by a decrease in market interest rates which drove an increase in value of the securities held in our portfolio during 2019.

Investment securities held-to-maturity are investments for which there is the intent and ability to hold the investment to maturity. These investments are carried at amortized cost. The held-to-maturity portfolio consists primarily of U.S. Government agency Small Business Investment Company bonds (SBIC) and Small Business Administration (SBA) bonds, CMO's and MBS's. The fair value of securities held-to-maturity totaled $653.1 million and $747.3 million at December 31, 2019 and December 31, 2018, respectively. The $94.2 million decrease was primarily due to paydowns, maturities, and calls of securities held in the portfolio totaling $116.5 million partially offset by an increase in the value of securities classified as held-to-maturity of $22.5 million during the year ended December 31, 2019.

ASC 320 "Investments – Debt Securities" requires an entity to determine how to classify a security at the time of acquisition. The appropriateness of the original classification should be reassessed at each reporting period. The transfer of investment securities from available-for-sale to held-to maturity category during the quarter ended December 31, 2018 was completed after an extensive analysis of the characteristics of all securities held in the portfolio, in addition to a review of our liquidity position under multiple scenarios including varying interest rate environments. Twenty-three of the twenty-five securities transferred from available-to-sale to held-to-maturity were collateralized mortgage obligations. Thirteen securities transferred were GNMA collateralized mortgage obligations which are backed by the full faith and credit of the U.S. government. The remaining ten collateralized mortgage obligations were issued by FNMA or FHLMC. Bonds issued by GNMA receive favorable risk rating when calculating regulatory risk-based capital ratios. In addition, GNMA, FNMA, AND FHLMC securities are often pledged as collateral as required to hold certain government deposits and are accepted as collateral as a result of the high quality and low-risk nature of these bonds. The other two securities transferred from available-for sale to held-to-maturity were FNMA agency mortgage backed securities.

After completion of these analyses and consideration of the factors mentioned above, management determined that it had the intent and ability to hold specific securities until maturity and it was appropriate to transfer them to the held-to-maturity category during the fourth quarter of 2018.

The fair value of the securities transferred to the held-to-maturity category was $230.1 million. The book value of the securities on the date of transfer was $239.5 million. The unrealized holding gain or loss on each individual security calculated at the time of transfer was reported as a component of shareholders' equity in the accumulated other comprehensive income account and will be amortized as an adjustment to yield over the remaining life of each security.

Restricted Stock

Restricted stock, which represents a required investment in the capital stock of correspondent banks related to available credit facilities, is carried at cost as of December 31, 2019 and December 31, 2018. As of those dates, restricted stock consisted of investments in the capital stock of the Federal Home Loan Bank of Pittsburgh ("FHLB") and Atlantic Community Bankers Bank ("ACBB").

At December 31, 2019 and December 31, 2018, the investment in FHLB stock totaled $2.6 million and $5.6 million, respectively. The $3.0 million decrease was due to a lower required investment in FHLB stock during 2019. At both December 31, 2019 and December 31, 2018, ACBB stock totaled $143,000.

Other Real Estate Owned

The balance of other real estate owned decreased to $1.7 million at December 31, 2019 from $6.2 million at December 31, 2018. The decrease was primarily the result of the disposition of a single OREO property totaling $4.9 million during 2019.

Operating Leases – Right of Use Asset

Accounting Standards Codification Topic 842, also known as ASC 842 and ASU 2016-02, is the new lease accounting standard published by the FASB. ASC 842 represents a significant modification to the accounting treatment for leases, with the most significant change being that most leases, including operating leases, will now be capitalized on the balance sheet. Under the previous guidance (ASC 840), FASB permitted operating leases to be reported only in the footnotes of corporate financial statements. Under ASC 842, the only leases that are exempt from the capitalization requirement are short-term leases less than or equal to twelve months in length.

The right-of-use asset is valued as the initial amount of the lease liability obligation adjusted for any initial direct costs, prepaid or accrued rent, and any lease incentives. At December 31, 2019, the balance of the operating lease right-of-use asset was $64.8 million.

Goodwill

Goodwill amounted to $5.0 million at both December 31, 2019 and December 31, 2018. We completed an annual impairment test for goodwill as of July 31, 2019 and 2018. Future impairment testing will be conducted as of July 31 on an annual basis, unless a triggering event occurs in the interim that would suggest impairment, in which case it would be tested as of the date of the triggering event. During the year ended December 31, 2019 and 2018, there was no goodwill impairment recorded. There can be no assurance that future impairment assessments or tests will not result in a charge to earnings.

Impairment is a condition that exists when the carrying amount of goodwill exceeds its implied fair value. As of July 31, 2019, the fair value of the Reporting Unit exceeded its carrying value by 21%. The determination of the fair value of the Reporting Unit incorporates assumptions that marketplace participants would use in their estimates of fair value of the Reporting Unit in a change of control transaction, as prescribed by ASC Topic 820.

To arrive at a conclusion of fair value, we utilize both the Income and Market Approach and then apply weighting factors to each result. Weighting factors represent our best business judgment of the weightings a market participant would utilize in arriving at a fair value for the reporting unit. In performing our analyses, we also made numerous assumptions with respect to industry performance, business, economic and market conditions and various other matters, many of which cannot be predicted and are beyond our control. With respect to financial projections, projections reflect the best currently available estimates and judgments as to the expected future financial performance of the Reporting Unit.

Premises and Equipment

The balance of premises and equipment increased to $117.0 million at December 31, 2019 from $87.7 million at December 31, 2018. The $29.3 million increase was primarily due to premises and equipment expenditures of $35.7 million less depreciation and amortization expenses of $6.5 million. New stores were opened in Lumberton, NJ, Feasterville, PA, and New York City during 2019 bringing the total store count to twenty-nine. We ended the year with stores under construction in Northfield, NJ and Bensalem, PA. Northfield was opened in January 2020 with Bensalem scheduled to be completed by mid-2020.

Deposits

Deposits, which include non-interest and interest-bearing demand deposits, money market, savings and time deposits, are Republic's major source of funding. Deposits are generally solicited from our market area through the offering of a variety of products to attract and retain customers, with a primary focus on multi-product relationships.

Total deposits increased by $606.3 million to $3.0 billion at December 31, 2019, from $2.4 billion at December 31, 2018. The increase was primarily the result of significant growth in demand deposit balances. We constantly focus our efforts on the growth of deposit balances through the successful execution of our relationship banking model which is based upon a high level of customer service and satisfaction. This strategy has also allowed us to build a stable core-deposit base and nearly eliminate our dependence upon the more volatile sources of funding found in brokered and internet certificates of deposit.

Short-term Borrowings

As of December 31, 2019, we had no short-term borrowings with the FHLB compared to $91.4 million at December 31, 2018. The short-term borrowings were paid off in 2019 as a result of growth in deposit balances.

Operating Lease Liability Obligation

Accounting Standards Codification Topic 842, also known as ASC 842 and ASU 2016-02, is the new lease accounting standard published by the FASB. ASC 842 represents a significant modification to the accounting treatment for leases, with the most significant change being that most leases, including operating leases, will now be capitalized on the balance sheet. Under the previous guidance (ASC 840), FASB permitted operating leases to be reported only in the footnotes of corporate financial statements. Under ASC 842, the only leases that are exempt from the capitalization requirement are short-term leases less than or equal to twelve months in length.

The operating lease liability obligation is calculated as the present value of the lease payments, using the discount rate specified in the lease, or if that is not available, our incremental borrowing rate. At December 31, 2019, the balance of the operating lease liability obligation was $68.9 million.

Shareholders' Equity

Total shareholders' equity increased $4.0 million to $249.2 million at December 31, 2019 compared to $245.2 million at December 31, 2018. The increase was primarily due to $4.6 million decrease in accumulated other comprehensive losses associated with an increase in the market value of investments in the portfolio, stock based compensation of $2.6 million, and stock option exercises of $261,000, partially offset by a $3.5 million net loss during the year ended December 31, 2019.

Investment Securities Portfolio

Republic's investment securities portfolio is intended to provide liquidity and contribute to earnings while diversifying credit risk. We attempt to maximize earnings while minimizing our exposure to interest rate risk. The securities portfolio consists primarily of U.S. Government agency collateralized mortgage obligations (CMO), agency mortgage-backed securities (MBS), corporate bonds, municipal securities, U.S. Government agency Small Business Investment Company bonds (SBIC), and Small Business Administration (SBA) bonds. Our ALCO committee monitors and reviews all security purchases.

A summary of investment securities available-for-sale and investment securities held-to-maturity at December 31, 2019, 2018, and 2017 is as follows:

	At December 31,		
(dollars in thousands)	**2019**	**2018**	**2017**
Available for sale			
U.S. Government agencies	$ 38,743	$ -	$ -
Collateralized mortgage obligations	329,492	197,812	327,972
Agency mortgage-backed securities	98,953	39,105	55,664
Municipal securities	4,064	20,807	15,142
Corporate bonds	69,499	62,583	62,670
Asset-backed securities	-	6,433	13,414
Trust preferred securities	-	-	725
Total amortized cost of securities	$ 540,751	$ 326,740	$ 475,587
Total fair value of investment securities	$ 539,042	$ 321,014	$ 464,430
Held to maturity			
U.S. Government agencies	$ 94,913	$ 107,390	$ 112,605
Collateralized mortgage obligations	416,177	500,690	215,567
Agency mortgage-backed securities	133,752	153,483	143,041
Other securities	-	-	1,000
Total amortized cost of securities	$ 644,842	$ 761,563	$ 472,213
Total fair value of investment securities	$ 653,109	$ 747,323	$ 463,799

The total amortized cost of the investment securities portfolio has grown to $1.2 billion at December 31, 2019 compared to $1.1 billion at December 31, 2018, and $947.8 million at December 31, 2017. Investment securities represented 35% of total assets at December 31, 2019 and 39% of total assets at December 31, 2018. We evaluate our investment securities portfolio on a continual basis in light of the interest rate environment and changing market conditions and when appropriate, take necessary actions to improve and enhance our overall positioning. We consider the portfolio to be well structured and of high quality. At December 31, 2019, 94% of the portfolio consisted of U.S. government debt securities or U.S. government agency issued mortgage-backed securities which were rated Aaa /AA+ by the major credit rating agencies.

The investment securities portfolio includes securities classified as both available for sale and held to maturity. During 2019 and 2018, we designated a portion of our securities portfolio as held to maturity based our intent and ability to hold those securities until they mature.

The fair value of investment securities is impacted by interest rates, credit spreads, market volatility and liquidity conditions. The fair value of investment securities generally decreases when interest rates rise and increases when interest rates fall. In addition, the fair value generally decreases when credit spreads widen and increases when credit spreads tighten. Net unrealized gains in the total investment securities portfolio were $6.6 million at December 31, 2019 compared to net unrealized losses of $20.0 million at December 31, 2018. The increase was a result of a decrease in market interest rates in 2019. The comparable amounts for the securities classified as available for sale were unrealized losses of $1.7 million at December 31, 2019 and unrealized losses of $5.7 million at December 31, 2018.

No single issuer of securities (excluding government agencies and Goldman Sachs corporate bonds) in the portfolio exceeded more than 10% of shareholders' equity at December 31, 2019 and December 31, 2018.

We held nine U.S. Government agency securities, thirty-two collateralized mortgage obligations and seventeen agency mortgage-backed securities that were in an unrealized loss position at December 31, 2019. Principal and interest payments of the underlying collateral for each of these securities carry minimal credit risk. Management found no evidence of OTTI on any of these securities and believes the unrealized losses are due to fluctuations in fair values resulting from changes in market interest rates and are considered temporary as of December 31, 2019.

At December 31, 2019, the investment portfolio included seven municipal securities with a total market value of $4.1 million. These securities are reviewed quarterly for impairment. Each bond carries an investment grade rating by either Moody's or Standard & Poor's. In addition, we periodically conduct our own independent review on each issuer to ensure the financial stability of the municipal entity. The largest geographic concentration was in Pennsylvania and New Jersey where five municipal securities had a market value of $3.3 million. As of December 31, 2019, management found no evidence of other than temporary impairment ("OTTI") on any of the municipal securities held in the investment securities portfolio.

At December 31, 2019, the investment portfolio included seven corporate bonds that were in an unrealized loss position. Management believes the unrealized losses on these securities were also driven by changes in market interest rates and not a result of credit deterioration. The seven corporate bonds are with four of the largest U.S. financial institutions. Each financial institution is well capitalized.

Proceeds associated with the sale of securities available for sale in 2019 were $54.7 million. Gross gains of $1.2 million and gross losses of $67,000 were realized on these sales. The tax provision applicable to the net gains of $1.1 million for the year ended December 31, 2019 amounted to $280,000.

Proceeds associated with the sale of securities available for sale in 2018 were $6.4 million. Gross losses of $67,000 were realized on these sales. The tax benefit applicable to the net losses for the year ended December 31, 2018 amounted to $18,000. Included in the 2018 sales activity was the sale of one CDO security. Proceeds from the sale of the CDO security totaled $660,000. A gross loss of $66,000 was realized on this sale. The tax benefit applicable to the net losses for the twelve months ended December 31, 2018 amounted to $17,000. Management had previously stated that it did not intend to sell CDO securities prior to their maturity or the recovery of their cost bases, nor would it be forced to sell these securities prior to maturity or recovery of the cost bases. This statement was made over a period of several years where there was limited trading activity in the pooled trust preferred CDO market resulting in fair market value estimates well below the book values. During 2018, management received several inquiries regarding the availability of the remaining CDO security and noted an increased level of trading in this type of security. As a result of the increased activity and the level of bids received, management elected to sell the remaining CDO security resulting in a net loss of $66,000 during 2018.

Proceeds associated with the sale of securities available for sale in 2017 were $31.2 million. Gross gains of $652,000 and gross losses of $798,000 were realized on these sales. The tax benefit applicable to the net losses for the year ended December 31, 2017 amounted to $52,000. Included in the 2017 sales activity were the sales of two CDO securities. Proceeds from the sale of the CDO securities totaled $1.5 million. Gross losses of $798,000 were realized on these sales. The tax benefit applicable to the net losses for the twelve months ended December 31, 2017 amounted to $287,000. As a result of the increased activity and the level of bids received, management elected to sell two CDOs resulting in a net loss of $798,000 during 2017 which was offset by gains on sales of agency mortgage-backed securities, collateralized mortgage obligations and corporate bonds.

The following table presents the maturity distribution and weighted average yield by holding type and year of maturity of our investment securities portfolio at December 31, 2019. Collateralized mortgage obligations and agency mortgage-backed securities have expected maturities that differ from contractual maturities because borrowers have the right to call or prepay and, therefore, these securities are classified separately with no specific maturity date.

	December 31, 2019												
	Within One Year		One to Five Years		Five to Ten Years		Past Ten Years		No Specific Maturity		Total		
(dollars in thousands)	**Amount**	**Yield**	**Amount**	**Yield**	**Amount**	**Yield**	**Amount**	**Yield**	**Amount**	**Yield**	**Fair value**	**Amortized Cost**	**Yield**
Available for Sale													
U.S. Government Agencies	$ -	-	$ 28,167	2.73%	$10,138	3.33%	$ -	-	$ -	-	$ 38,305	$ 38,743	2.89%
Collateralized mortgage obligations	-	-	-	-	-	-	-	-	331,438	2.27%	331,438	329,492	2.27%
Agency mortgage-backed securities	-	-	-	-	-	-	-	-	98,937	2.73%	98,937	98,953	2.73%
Municipal securities	792	4.13%	2,694	2.07%	596	3.29%	-	-	-	-	4,082	4,064	2.65%
Corporate bonds	3,003	3.09%	8,574	3.21%	51,883	2.42%	2,820	4.21%	-	-	66,280	69,499	2.62%
Total AFS securities	$ 3,795	3.31%	$ 39,435	2.79%	$62,617	2.58%	$ 2,820	4.21%	$ 430,375	2.38%	$539,042	$ 540,751	2.45%
Held to Maturity													
U.S. Government Agencies	$ -	-	$ 20,073	2.46%	$75,028	2.45%	$ -	-	$ -	-	$ 95,101	$ 94,913	2.45%
Collateralized mortgage obligations	-	-	-	-	-	-	-	-	422,987	2.40%	422,987	416,177	2.40%
Agency mortgage-backed securities	-	-	-	-	-	-	-	-	135,021	2.42%	135,021	133,752	2.42%
Total HTM securities	$ -	-	$ 20,073	2.46%	$75,028	2.45%	$ -	-	$ 558,008	2.40%	$653,109	$ 644,842	2.41%

Fair Value of Financial Instruments

Management uses its best judgment in estimating the fair value of our financial instruments; however, there are inherent weaknesses in any estimation technique. Therefore, for substantially all financial instruments, the fair value estimates herein are not necessarily indicative of the amounts we could have realized in a sale transaction on the dates indicated. The estimated fair value amounts have been measured as of their respective year-ends and have not been re-evaluated or updated for purposes of these financial statements subsequent to those respective dates. As such, the estimated fair values of these financial instruments subsequent to the respective reporting dates may be different than the amounts reported at each year-end.

We follow the guidance issued under ASC 820, *Fair Value Measurement*, which defines fair value, establishes a framework for measuring fair value under GAAP, and identifies required disclosures on fair value measurements.

ASC 820 establishes a fair value hierarchy that prioritizes the inputs to valuation methods used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under ASC 820 are as follows:

Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2: Quoted prices in markets that are not active, or inputs that are observable either directly or indirectly, for substantially the full term of the asset or liability.

Level 3: Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e., supported with little or no market activity).

An asset's or liability's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

The fair value of securities available for sale (carried at fair value) and held to maturity (carried at amortized cost) are determined by obtaining quoted market prices on nationally recognized securities exchanges (Level 1), or matrix pricing (Level 2), which is a mathematical technique used widely in the industry to value debt securities without relying exclusively on quoted market prices for the specific securities but rather by relying on the securities' relationship to other benchmark quoted prices. For certain securities, which are not traded in active markets or are subject to transfer restrictions, valuations are adjusted to reflect illiquidity and/or non-transferability, and such adjustments, are generally based on available market evidence (Level 3). In the absence of such evidence, management's best estimate is used. Management's best estimate consists of both internal and external support on certain Level 3 investments. Internal cash flow models using a present value formula that includes assumptions market participants would use along with indicative exit pricing obtained from broker/dealers (where available) were used to support fair values of certain Level 3 investments.

The types of instruments valued based on matrix pricing in active markets include all of our U.S. government and agency securities, corporate bonds, and municipal obligations. Such instruments are generally classified within Level 2 of the fair value hierarchy. As required by ASC 820-10, we do not adjust the matrix pricing for such instruments.

Level 3 is for positions that are not traded in active markets or are subject to transfer restrictions, and may be adjusted to reflect illiquidity and/or non-transferability, with such adjustment generally based on available market evidence. In the absence of such evidence, management's best estimate is used. Subsequent to inception, management only changes Level 3 inputs and assumptions when corroborated by evidence such as transactions in similar instruments, completed or pending third-party transactions in the underlying investment or comparable entities, subsequent rounds of financing, recapitalizations and other transactions across the capital structure, offerings in the equity or debt markets, and changes in financial ratios or cash flows. There was one Level 3 investment security classified as available-for-sale at December 31, 2019. This security is a corporate bond.

The trust preferred securities held during 2018 and 2017 were pools of similar securities that are grouped into an asset structure commonly referred to as collateralized debt obligations ("CDOs") which consist of the debt instruments of various banks, diversified by the number of participants in the security as well as geographically. The secondary market for these securities had become inactive, and therefore the securities were classified as a Level 3 securities. The fair value analysis did not reflect or represent the actual terms or prices at which any party could purchase the securities. The last trust preferred security was sold in 2018.

The following table presents a reconciliation of the securities available for sale measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the year ended December 31, 2019, 2018, and 2017:

	Year Ended December 31, 2019		Year Ended December 31, 2018		Year Ended December 31, 2017	
Level 3 Investments Only *(dollars in thousands)*	**Trust Preferred Securities**	**Corporate Bonds**	**Trust Preferred Securities**	**Corporate Bonds**	**Trust Preferred Securities**	**Corporate Bonds**
Balance, January 1,	$ -	$ 3,069	$ 489	$ 3,086	$ 1,820	$ 2,971
Unrealized gains (losses)	-	(250)	237	(17)	1,006	115
Paydowns	-	-	-	-	-	-
Proceeds from sales	-	-	(660)	-	(1,539)	-
Realized losses	-	-	(66)	-	(798)	-
Impairment charges on Level 3	-	-	-	-	-	-
Balance, December 31,	$ -	$ 2,819	$ -	$ 3,069	$ 489	$ 3,086

An independent, third party pricing service was used to estimate the current fair market value of the CDO previously held in the investment securities portfolio. The calculations used to determine fair value were based on the attributes of the trust preferred security, the financial condition of the issuers of the trust preferred security, and market based assumptions. The INTEX CDO Deal Model Library was utilized to obtain information regarding the attributes of the security and its specific collateral as of December 31, 2017. Financial information on the issuers was also obtained from Bloomberg, the FDIC, and S&P Global Market Intelligence. Both published and unpublished industry sources were utilized in estimating fair value. Such information includes loan prepayment speed assumptions, discount rates, default rates, and loss severity percentages.

The fair market valuation for the CDO was determined based on discounted cash flow analyses. The cash flows were primarily dependent on the estimated speeds at which the trust preferred security was expected to prepay, the estimated rates at which the trust preferred security were expected to defer payments, the estimated rates at which the trust preferred security were expected to default, and the severity of the related losses on the security.

Increases (decreases) in actual or expected issuer defaults tended to decrease (increase) the fair value of our senior and mezzanine tranches of CDOs. The values of our mezzanine tranches of CDOs were also affected by expected future interest rates. However, due to the structure of each security, timing of cash flows, and secondary effects on the financial performance of the underlying issuers, the effects of changes in future interest rates on the fair value of our holdings were not quantifiably estimable.

The remaining Level 3 investment security classified as available for sale is a corporate bond that is not actively traded. Impairment would depend on the repayment ability of the underlying issuer, which is assessed through a detailed quarterly review of the issuer's financial statements. The issuer is a "well capitalized" financial institution as defined by federal banking regulations and has demonstrated the ability to raise additional capital, when necessary, through the public capital markets. The fair value of this corporate bond is estimated by obtaining a price of a comparable floating rate debt instrument through Bloomberg.

Loan Portfolio

Our loan portfolio consists of secured and unsecured commercial loans including commercial real estate loans, construction and land development loans, commercial and industrial loans, owner occupied real estate loans, consumer and other loans, and residential mortgages. Commercial loans are primarily secured term loans made to small to medium-sized businesses and professionals for working capital, asset acquisition and other purposes. Commercial loans are originated as either fixed or variable rate loans with typical terms of 1 to 5 years. Republic's commercial loans typically range between $250,000 and $5.0 million, but customers may borrow significantly larger amounts up to Republic's legal lending limit of approximately $38.2 million at December 31, 2019. Management has established an internal monitoring guideline for loan relationships in the amount of $25.4 million which approximates 10% of capital and reserves. Individual customers may have several loans often secured by different collateral. We had one loan relationship in excess of $25.4 million at December 31, 2019 that amounted to $28.0 million. There were two relationships in excess of $22.9 million at December 31, 2018 that amounted to $52.0 million on a combined basis.

The majority of loans outstanding are with borrowers in our marketplace, Philadelphia and the surrounding suburbs, Southern New Jersey, and New York City. In addition, we have loans to customers whose assets and businesses are concentrated in real estate. Repayment of our loans is in part dependent upon general economic conditions affecting our market place and specific industries in which our customers operate. We evaluate each customer's credit worthiness on a case-by-case basis. The amount of collateral obtained is based on management's credit evaluation of the customer. Collateral varies but primarily includes residential, commercial and income-producing properties.

At December 31, 2019, we had loan concentrations exceeding 10% of total loans for credits extended to lessors of nonresidential real estate in the aggregate amount of $345.2 million, which represented 20% of gross loans receivable, private households in the aggregate amount of $451.1 million which represented 26% of gross loans receivable, and lessors of residential real estate in the aggregate amount of $178.9 million, which represented 10% of gross loans receivable. Loan concentrations are considered to exist when amounts are loaned to multiple numbers of borrowers engaged in similar activities that management believes would cause them to be similarly impacted by economic or other conditions. At December 31, 2019, we had no foreign loans outstanding.

The following table sets forth gross loans by major categories for the periods indicated:

(dollars in thousands)	At December 31, 2019	2018	2017	2016	2015
Commercial real estate	$ 613,631	$ 515,738	$ 433,304	$ 378,519	$ 349,726
Construction and land development	121,395	121,042	104,617	61,453	46,547
Commercial and industrial	223,906	200,423	173,343	174,744	181,850
Owner occupied real estate	424,400	367,895	309,838	276,986	246,398
Consumer and other	101,320	91,152	76,183	63,660	48,126
Residential mortgage	263,444	140,364	64,764	9,682	2,380
Total loans	$ 1,748,096	$ 1,436,614	$ 1,162,049	$ 965,044	$ 875,027
Deferred loan costs (fees)	99	(16)	229	(72)	(258)
Total loans, net of deferred loan fees	$ 1,748,195	$ 1,436,598	$ 1,162,278	$ 964,972	$ 874,769

Total loans, net of deferred loan costs, increased $311.6 million, or 22%, to $1.7 billion at December 31, 2019, versus $1.4 billion at December 31, 2018. This growth was the result of an increase in loan demand across all loan categories driven by the successful execution of our relationship banking strategy which focuses on customer service.

Loan Maturity and Interest Rate Sensitivity

The amount of loans outstanding by category as of the dates indicated, which are due in: (i) one year or less, (ii) more than one year through five years, and (iii) over five years, is shown in the following table. Loan balances are also categorized according to their sensitivity to changes in interest rates.

(dollars in thousands)	Commercial Real Estate	Construction and Land Development	Commercial and Industrial	Owner Occupied Real Estate	Consumer and Other	Residential Mortgage	Total
Fixed rate:							
1 year or less	$ 53,008	$ 5,561	$ 15,991	$ 38,198	$ 952	$ -	$ 113,710
1-5 years	368,783	35,021	84,497	184,678	1,783	-	674,762
After 5 years	171,530	24,104	53,914	120,882	17,008	261,296	648,734
Total fixed rate	593,321	64,686	154,402	343,758	19,743	261,296	1,437,206
Adjustable rate:							
1 year or less	$ 9,377	$ 34,615	$ 54,159	$ 4,033	$ 767	$ -	$ 102,951
1-5 years	10,382	21,963	10,437	16,897	3,550	-	63,229
After 5 years	551	131	4,908	59,712	77,260	2,148	144,710
Total adjustable rate	20,310	56,709	69,504	80,642	81,577	2,148	310,890
Total	$ 613,631	$ 121,395	$ 223,906	$ 424,400	$ 101,320	$ 263,444	$ 1,748,096

In the ordinary course of business, loans maturing within one year may be renewed, in whole or in part, as to principal amount, and at interest rates prevailing at the date of renewal. At December 31, 2019, 82% of total loans were fixed rate compared to 77% at December 31, 2018.

Credit Quality

Republic's written lending policies require specific underwriting, loan documentation and credit analysis standards to be met prior to funding, with independent credit department approval for the majority of new loan balances. A committee consisting of senior management and certain members of the Board of Directors oversees the loan approval process to monitor that proper standards are maintained, while approving the majority of commercial loans.

Loans, including impaired loans, are generally classified as non-accrual if they are past due as to maturity or payment of interest or principal for a period of more than 90 days, unless such loans are well-secured and in the process of collection. Loans that are on a current payment status or past due less than 90 days may also be classified as non-accrual if repayment of principal and/or interest in full is in doubt. Loans may be returned to accrual status when all principal and interest amounts contractually due are reasonably assured of repayment within an acceptable period of time, and there is a sustained period of repayment performance by the borrower, in accordance with the contractual terms.

While a loan is classified as non-accrual, any collections of interest and principal are generally applied as a reduction to principal outstanding. When the future collectability of the recorded loan balance is expected, interest income may be recognized on a cash basis. For non-accrual loans, which have been partially charged off, recognition of interest on a cash basis is limited to that which would have been recognized on the recorded loan balance at the contractual interest rate. Cash interest receipts in excess of that amount are recorded as recoveries to the allowance for loan losses until prior charge-offs have been fully recovered.

The following summary shows information concerning loan delinquency and non-performing assets at the dates indicated:

	At December 31,				
(dollars in thousands)	**2019**	**2018**	**2017**	**2016**	**2015**
Loans accruing, but past due 90 days or more	$ -	$ -	$ -	$ 302	$ -
Non-accrual loans:					
Commercial real estate	4,159	4,631	8,963	13,089	5,913
Construction and land development	-	-	-	-	117
Commercial and industrial	3,087	3,661	2,895	3,151	3,156
Owner occupied real estate	3,337	1,188	2,136	1,546	2,894
Consumer and other	1,062	861	851	808	542
Residential mortgage	768	-	-	-	-
Total non-accrual loans	12,413	10,341	14,845	18,594	12,622
Total non-performing loans(1)	12,413	10,341	14,845	18,896	12,622
Other real estate owned	1,730	6,223	6,966	10,174	11,313
Total non-performing assets(1)	$ 14,143	$ 16,564	$ 21,811	$ 29,070	$ 23,935
Non-performing loans as a percentage of total loans, net of unearned income(1)	0.71%	0.72%	1.28%	1.96%	1.44%
Non-performing assets as a percentage of total assets	0.42%	0.60%	0.94%	1.51%	1.66%

(1) Non-performing loans are comprised of (i) loans that are on non-accrual basis and (ii) accruing loans that are 90 days or more past due. Non-performing assets are composed of non-performing loans and other real estate owned.

Problem loans can consist of loans that are performing, but for which potential credit problems of the borrowers have caused management to have serious doubts as to the ability of such borrowers to continue to comply with present repayment terms. At December 31, 2019, all identified problem loans included in the preceding table are internally classified and have been evaluated for a specific reserve allocation in the allowance for loan losses (see discussion on "Allowance for Loan Losses").

Non-performing assets decreased by $2.4 million, or 15%, to $14.1 million at December 31, 2019, compared to $16.6 million at December 31, 2018. An increase in non-performing loans was driven by additions to non-performing loans of $6.4 million during 2019, offset by payments of $1.8 million, charge-offs of $1.4 million and transfers to other real estate owned of $1.2 million. The reduction in other real estate owned was the result of the disposition of a single OREO property totaling $4.9 million.

The following summary shows the impact on interest income of non-accrual loans, subsequent to being placed on non-accrual for the periods indicated:

	For the Year Ended December 31,				
(dollars in thousands)	**2019**	**2018**	**2017**	**2016**	**2015**
Interest income that would have been recorded had the loans been in accordance with their original terms	$ 548	$ 498	$ 590	$ 1,024	$ 765
Interest income included in net income	$ -	$ -	$ -	$ -	$ -

Allowance for Loan Losses

The allowance for loan losses is a valuation allowance for probable losses inherent in the loan portfolio. We evaluate the need to establish an allowance against loan losses on a quarterly basis. When an increase in this allowance is necessary, a provision for loan losses is charged to earnings. The allowance for loan losses consists of three components. The first component is allocated to individually evaluated loans found to be impaired and is calculated in accordance with ASC 310 *Receivables*. The second component is allocated to all other loans that are not individually identified as impaired pursuant to ASC 310-10 ("non-impaired loans"). This component is calculated for all non-impaired loans on a collective basis in accordance with ASC 450 *Contingencies*. The third component is an unallocated allowance to account for a level of imprecision in management's estimation process.

We evaluate loans for impairment and potential charge-off on a quarterly basis. Management regularly monitors the condition of borrowers and assesses both internal and external factors in determining whether any loan relationships have deteriorated. Any loan rated as substandard or lower will have an individual collateral evaluation analysis prepared to determine if a deficiency exists. We first evaluate the primary repayment source. If the primary repayment source is determined to be insufficient and unlikely to repay the debt, we then look to the secondary repayment sources. Secondary sources are conservatively reviewed for liquidation values. Updated appraisals and financial data are obtained to substantiate current values. If the reviewed sources are deemed to be inadequate to cover the outstanding principal and any costs associated with the resolution of a troubled loan, an estimate of the deficient amount will be calculated and a specific allocation of loan loss reserve is recorded.

Factors considered in the calculation of the allowance for non-impaired loans include several qualitative and quantitative factors such as historical loss experience, trends in delinquency and nonperforming loan balances, changes in risk composition and underwriting standards, experience and ability of management, and general economic conditions along with other external factors. Historical loss experience is analyzed by reviewing charge-offs over a three year period to determine loss rates consistent with the loan categories depicted in the allowance for loan loss table below.

The factors supporting the allowance for loan losses do not diminish the fact that the entire allowance for loan losses is available to absorb losses in the loan portfolio and related commitment portfolio, respectively. Our principal focus, therefore, is on the adequacy of the total allowance for loan losses. The allowance for loan losses is subject to review by banking regulators on a regular basis. Our primary bank regulators regularly conduct examinations of the allowance for loan losses and make assessments regarding the adequacy and the methodology employed in their determination.

A detailed analysis of our allowance for loan losses for the years ended December 31, 2019, 2018, 2017, 2016, and 2015 is as follows:

	For the Year Ended December 31,				
(dollars in thousands)	**2019**	**2018**	**2017**	**2016**	**2015**
Balance at beginning of period	$ 8,615	$ 8,599	$ 9,155	$ 8,703	$ 11,536
Charge-offs:					
Commercial real estate	-	1,603	-	-	2,624
Construction and land development	-	-	-	60	260
Commercial and industrial	1,356	151	1,366	143	408
Owner occupied real estate	-	465	157	1,052	133
Consumer and other	126	219	53	11	-
Residential mortgage	-	-	-	10	-
Total charge-offs	1,482	2,438	1,576	1,276	3,425
Recoveries:					
Commercial real estate	-	50	54	6	4
Construction and land development	-	-	-	-	5
Commercial and industrial	217	81	64	163	49
Owner occupied real estate	2	20	-	-	-
Consumer and other	9	3	2	2	34
Residential mortgage	-	-	-	-	-
Total recoveries	228	154	120	171	92
Net charge-offs	1,254	2,284	1,456	1,105	3,333
Provision for loan losses	1,905	2,300	900	1,557	500
Balance at end of period	$ 9,266	$ 8,615	$ 8,599	$ 9,155	$ 8,703
Average loans outstanding[(1)]	$ 1,544,904	$ 1,340,117	$ 1,090,851	$ 936,492	$ 820,820
As a percent of average loans:[(1)]					
Net charge-offs	0.08%	0.17%	0.13%	0.12%	0.41%
Provision for loan losses	0.12%	0.17%	0.08%	0.17%	0.06%
Allowance for loan losses	0.60%	0.64%	0.79%	0.98%	1.06%
Allowance for loan losses to:					
Total loans, net of unearned income	0.53%	0.60%	0.74%	0.95%	0.99%
Total non-performing loans	74.65%	83.31%	57.93%	48.45%	68.95%

(1) Includes non-accruing loans.

The provision for loan losses is charged to operations in an amount necessary to bring the total allowance for loan losses to a level that management believes is adequate to absorb inherent losses in the loan portfolio. We recorded a loan loss provision in the amount of $1.9 million in 2019 compared to a $2.3 million provision in 2018. The decrease in the provision during 2019 was driven a decrease in the allowance required for loans individually evaluated for impairment. The ratio of non-performing assets to total assets declined to 0.42% as of December 31, 2019 compared to 0.60% as of December 31, 2018. Net charge-offs as a percentage of average loans outstanding declined to 0.08% for the year ended December 31, 2019 from 0.17% for the year ended December 31, 2018.

The allowance for loan losses as a percentage of non-performing loans (coverage ratio) was 75% at December 31, 2019 as compared to 83% at December 31, 2018 and 58% at December 31, 2017. The decrease in the coverage ratio during 2019 was mainly driven by the decrease in the allowance required for loans individually evaluated for impairment. All loans individually evaluated for impairment are adequately secured with collateral and/or specific reserves. Coverage is considered adequate by management as of December 31, 2019.

Management makes at least a quarterly determination as to an appropriate provision from earnings to maintain an allowance for loan losses that it determines is adequate to absorb inherent losses in the loan portfolio. The Board of Directors periodically reviews the status of all non-accrual and impaired loans and loans classified by the management team. The Board of Directors also considers specific loans, pools of similar loans, historical charge-off activity, economic conditions and other relevant factors in reviewing the adequacy of the allowance for loan losses. Any additions deemed necessary to the allowance for loan losses are charged to operating expenses.

We evaluate loans for impairment and potential charge-offs on a quarterly basis. Any loan rated as substandard or lower will have a collateral evaluation analysis completed in accordance with the guidance under generally accepted accounting principles (GAAP) on impaired loans to determine if a deficiency exists. Our credit monitoring process assesses the ultimate collectability of an outstanding loan balance from all potential sources. When a loan is determined to be uncollectible it is charged-off against the allowance for loan losses. Unsecured commercial loans and all consumer loans are charged-off immediately upon reaching the 90-day delinquency mark unless they are well secured and in the process of collection. The timing on charge-offs of all other loan types is subjective and will be recognized when management determines that full repayment, either from the cash flow of the borrower, collateral sources, and/or guarantors, will not be sufficient and that repayment is unlikely. A full or partial charge-off is recognized equal to the amount of the estimated deficiency calculation.

Serious delinquency is often the first indicator of a potential charge-off. Reductions in appraised collateral values and deteriorating financial condition of borrowers and guarantors are factors considered when evaluating potential charge-offs. The likelihood of possible recoveries or improvements in a borrower's financial condition is also assessed when considering a charge-off.

Partial charge-offs of non-performing and impaired loans can significantly reduce the coverage ratio and other credit loss statistics due to the fact that the balance of the allowance for loan losses will be reduced while still carrying the remainder of a non-performing loan balance in the impaired loan category. The amount of non-performing loans for which partial charge-offs have been recorded during the year amounted to \$3.6 million at December 31, 2019 compared to \$4.4 million at December 31, 2018. This decrease was primarily driven by full charge-offs during 2019.

Our charge-off policy is reviewed on an annual basis and updated as necessary. During the twelve months ended December 31, 2019, there have been no changes made to this policy.

We have an existing loan review program, which monitors the loan portfolio on an ongoing basis. A loan review officer who reviews both the loan portfolio and overall adequacy of the allowance for loan losses conducts this loan review on a quarterly basis and reports directly to the Board of Directors.

Estimating the appropriate level of the allowance for loan losses at any given date is difficult, particularly in a continually changing economy. In management's opinion, the allowance for loan losses was appropriate at December 31, 2019. However, there can be no assurance that, if asset quality deteriorates in future periods, additions to the allowance for loan losses will not be required.

Management is unable to determine in which loan category future charge-offs and recoveries may occur. The following schedule sets forth the allocation of the allowance for loan losses among various categories. The allocation is based on management's evaluation of historical charge-off experience and adjusted for several qualitative factors. The entire allowance for loan losses is available to absorb loan losses in any loan category.

The allocation of the allowance for loan losses for the past five years is as follows:

	At December 31,									
	2019		2018		2017		2016		2015	
(dollars in thousands)	Amount	% of Loans	Amount	% of Loans	Amount	% of Loans	Amount	% of Loans	Amount	% of Loans
Commercial real estate	$ 3,043	35.1%	$ 2,462	35.9%	$ 3,774	37.3%	$ 3,254	39.2%	$ 2,393	40.0%
Construction and land development	688	6.9%	777	8.4%	725	9.0%	557	6.4%	338	5.3%
Commercial and industrial	931	12.8%	1,754	14.0%	1,317	14.9%	2,884	18.1%	2,932	20.8%
Owner occupied real estate	2,292	24.3%	2,033	25.6%	1,737	26.7%	1,382	28.7%	2,030	28.1%
Consumer and other	590	5.8%	577	6.3%	573	6.5%	588	6.6%	295	5.5%
Residential mortgage	1,705	15.1%	894	9.8%	392	5.6%	58	1.0%	14	0.3%
Unallocated	17	-	118	-	81	-	432	-	701	-
Total allowance for loan losses	$ 9,266	100%	$ 8,615	100%	$ 8,599	100%	$ 9,155	100%	$ 8,703	100%

The allowance for loan losses is an amount that represents management's estimate of known and inherent losses related to the loan portfolio and unfunded loan commitments. Because the allowance for loan losses is dependent, to a great extent, on the general economy and other conditions that may be beyond our control, the estimate of the allowance for loan losses could differ materially in the near term.

The allowance consists of specific, general and unallocated components. The specific component relates to impaired loans. For such loans, an allowance is established when the discounted cash flows, collateral value, or observable market price of the impaired loan is lower than the carrying value of that loan. The general component covers the remainder of the portfolio and is based on historical loss experience adjusted for several qualitative factors. An unallocated component is maintained to cover uncertainties that could affect management's estimate of probable losses. The unallocated component of the allowance reflects the margin of imprecision inherent in the underlying assumptions used in the methodologies for estimating specific and general losses in the portfolio. All identified losses are immediately charged off and therefore no portion of the allowance for loan losses is restricted to any individual loan or group of loans, and the entire allowance is available to absorb any and all loan losses.

In estimating the allowance for loan losses, management considers current economic conditions, past loss experience, diversification of the loan portfolio, delinquency statistics, results of internal loan reviews and regulatory examinations, borrowers' perceived financial and managerial strengths, the adequacy of underlying collateral, if collateral dependent, or present value of future cash flows, and other relevant and qualitative risk factors. These qualitative risk factors include:

1. Lending policies and procedures, including underwriting standards and collection, charge-off and recovery practices.
2. National, regional and local economic and business conditions as well as the condition of various segments.
3. Nature and volume of the portfolio and terms of loans.
4. Experience, ability and depth of lending management and staff.
5. Volume and severity of past due, classified and nonaccrual loans as well as other loan modifications.
6. Quality of our loan review system, and the degree of oversight by our Board of Directors.
7. Existence and effect of any concentration of credit and changes in the level of such concentrations.
8. Effect of external factors, such as competition and legal and regulatory requirements.

Each factor is assigned a value to reflect improving, stable or declining conditions based on management's best judgment using relevant information available at the time of the evaluation. Adjustments to the factors are supported through documentation of changes in conditions in a narrative accompanying the allowance for loan loss calculation.

We also provide specific reserves for impaired loans to the extent the estimated realizable value of the underlying collateral is less than the loan balance, when the collateral is the only source of repayment. Also, we estimate and recognize reserve allocations on loans identified as "internally classified accruing loans" based upon any factor that might impact loss estimates. Those factors include but are not limited to the impact of economic conditions on the borrower and management's potential alternative strategies for loan or collateral disposition. An unallocated allowance is established for losses that have not been identified through the formulaic and other specific components of the allowance as described above. Management has identified several factors that impact credit losses that are not considered in either the formula or the specific allowance segments. These factors consist of macro and micro economic conditions, industry and geographic loan concentrations, changes in the composition of the loan portfolio, changes in underwriting processes and trends in problem loan and loss recovery rates. The impact of the above is considered in light of management's conclusions as to the overall adequacy of underlying collateral and other factors.

The majority of our loan portfolio represents loans made for commercial purposes, while significant amounts of residential property may serve as collateral for such loans. We attempt to evaluate larger loans individually, on the basis of our loan review process, which scrutinizes loans on a selective basis and other available information. Even if all commercial purpose loans could be reviewed, information on potential problems might not be available. Our portfolio of loans made for purposes of financing residential mortgages and consumer loans are evaluated in groups.

A loan is considered impaired, in accordance with ASC 310, when based on current information and events, it is probable that we will be unable to collect all amounts due from the borrower in accordance with the contractual terms of the loan. Impaired loans include nonperforming loans, but also include internally classified accruing loans. As of December 31, 2019, management identified a total of one troubled debt restructuring in the loan portfolio in the amount of $6.2 million. Five troubled debt restructurings in the amount of $7.8 million were identified as of December 31, 2018.

The following table presents our impaired loans at December 31, 2019, 2018, and 2017:

(dollars in thousands)	**December 31,**		
	2019	**2018**	**2017**
Impaired loans without a valuation allowance	$ 12,862	$ 10,602	$ 15,270
Impaired loans with a valuation allowance	6,020	7,428	9,446
Total impaired loans	$ 18,882	$ 18,030	$ 24,716
Valuation allowance related to impaired loans	$ 556	$ 1,473	$ 2,790
Total nonaccrual loans	12,413	10,341	14,845
Total loans past-due ninety days or more and still accruing	-	-	-

For the years ended December 31, 2019, 2018, and 2017, the average recorded investment in impaired loans was approximately $18.1 million, $22.8 million, and $25.4 million, respectively. Republic earned $386,000, $451,000, and $607,000 of interest income on impaired loans (internally classified accruing loans) in 2019, 2018, and 2017, respectively. There were no commitments to extend credit to any borrowers with impaired loans as of the end of the periods presented herein.

Total impaired loans increased by $852,000, or 5%, during the year ended December 31, 2019. This increase was primarily loans determined to be impaired during 2019. The valuation allowance related to impaired loans decreased to $556,000 at December 31, 2019 compared to $1.5 million at December 31, 2018. At December 31, 2019 and 2018, internally classified accruing loans totaled approximately $2.3 million and $3.7 million, respectively.

The following table presents our 30 to 89 days past due loans at December 31, 2019, 2018, and 2017:

(dollars in thousands)	**December 31,**		
	2019	**2018**	**2017**
30 to 59 days past due	$ 112	$ 1,135	$ 1,113
60 to 89 days past due	1,823	1,574	-
Total loans 30 to 89 days past due	$ 1,935	$ 2,709	$ 1,113

Management has engaged in active discussions with all delinquent relationships to address delinquencies and is confident that acceptable resolutions will be achieved in the near term.

Deposits

Total deposits at December 31, 2019 were $3.0 billion, an increase of $606.3 million or 25% from total deposits of $2.4 billion at December 31, 2018. Total deposits by account type at December 31, 2019, 2018, and 2017 are as follows:

(dollars in thousands)	**At December 31,**		
	2019	**2018**	**2017**
Demand deposits, non-interest bearing	$ 661,431	$ 519,056	$ 438,500
Demand deposits, interest bearing	1,352,360	1,042,561	807,736
Money market & savings deposits	761,793	676,993	700,322
Time deposits	223,579	154,257	116,737
Total deposits	$ 2,999,163	$ 2,392,867	$ 2,063,295

In general, Republic pays higher interest rates on time deposits compared to other deposit categories. Republic's various deposit liabilities may fluctuate from period-to-period, reflecting customer behavior and strategies to optimize net interest income. The increase in total deposits to $3.0 billion at December 31, 2019 from $2.4 billion at December 31, 2018 was primarily the result of a $452.2 million increase in demand deposits, which reflects the success of our strategy based on a high level of customer service and satisfaction, which drives the gathering of low-cost core deposits. This strategy has also allowed us to eliminate our dependence on the more volatile source of funding in brokered and internet based certificates of deposit.

The average balances and weighted average rates of Republic's deposits for the last three years are as follows:

	For the Years Ended December 31,					
	2019		**2018**		**2017**	
(dollars in thousands)	**Average Balance**	**Rate**	**Average Balance**	**Rate**	**Average Balance**	**Rate**
Demand deposits:						
Non-interest bearing	$ 555,385		$ 488,995		$ 372,171	
Interest bearing	1,184,530	1.32%	918,508	0.87%	687,586	0.44%
Money market & savings deposits	705,445	0.98%	697,135	0.70%	629,464	0.50%
Time deposits	190,567	2.02%	128,892	1.23%	110,952	1.12%
Total deposits	$ 2,635,927	1.00%	$ 2,233,530	0.65%	$ 1,800,173	0.41%

The remaining maturity of certificates of deposit for $100,000 or more as of December 31, 2019 is as follows:

(dollars in thousands)	
Maturity:	
3 months or less	$ 24,262
3 to 6 months	68,026
6 to 12 months	51,984
Over 12 months	41,623
Total	$ 185,895

The following is a summary of the remaining maturity of time deposits, which includes certificates of deposits of $100,000 or more, as of December 31, 2019:

(dollars in thousands)	
Maturity:	
2020	$ 170,562
2021	50,079
2022	1,130
2023	1,071
2024	737
Thereafter	-
Total	$ 223,579

Off-Balance Sheet Arrangements

We are a party to financial instruments with off-balance-sheet risk in the normal course of business to meet the financing needs of our customers. These financial instruments include commitments to extend credit and standby letters of credit. These instruments involve to varying degrees, elements of credit and interest rate risk in excess of the amount recognized in the financial statements.

Credit risk is defined as the possibility of sustaining a loss due to the failure of the other parties to a financial instrument to perform in accordance with the terms of the contract. The maximum exposure to credit loss under commitments to extend credit and standby letters of credit is represented by the contractual amount of these instruments. We use the same underwriting standards and policies in making credit commitments as we do for on-balance-sheet instruments.

Financial instruments whose contract amounts represent potential credit risk are commitments to extend credit of approximately $329.9 million and $286.4 million and standby letters of credit of approximately $17.2 million and $13.9 million at December 31, 2019 and 2018, respectively. Commitments often expire without being drawn upon. The $329.9 million of commitments to extend credit at December 31, 2019, substantially all were variable rate commitments.

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Commitments generally have fixed expiration dates or other termination clauses and many require the payment of a fee. Since many of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. We evaluate each customer's creditworthiness on a case-by-case basis. The amount of collateral obtained upon extension of credit is based on management's credit evaluation of the customer. Collateral held varies but may include real estate, marketable securities, pledged deposits, equipment and accounts receivable.

Standby letters of credit are conditional commitments issued that guarantee the performance of a customer to a third party. The credit risk and collateral policy involved in issuing letters of credit is essentially the same as that involved in extending loan commitments. The amount of collateral obtained is based on management's credit evaluation of the customer. Collateral held varies but may include real estate, marketable securities, pledged deposits, equipment and accounts receivable.

Contractual Obligations and Other Commitments

The following table sets forth contractual obligations and other commitments representing required and potential cash outflows as of December 31, 2019:

(dollars in thousands)	**Total**	**Less than One Year**	**One to Three Years**	**Three to Five Years**	**After Five Years**
Minimum annual rentals or non-cancellable operating leases	$ 99,355	$ 7,221	$ 11,385	$ 10,028	$ 70,721
Branch construction commitments	5,300	5,300	-	-	-
Remaining contractual maturities of time deposits	225,175	172,158	51,209	1,808	-
Subordinated debt	11,375	34	-	-	11,341
Director and Officer retirement plan obligations	1,111	672	103	104	232
Loan commitments	329,874	144,236	48,068	34,690	102,880
Standby letters of credit	17,211	16,279	932	-	-
Total	$ 689,401	$ 345,900	$ 111,697	$ 46,630	$ 185,174

As of December 31, 2019, we had entered into non-cancelable lease agreements for our main office and operations center, seventeen current and pending retail branch facilities, five loan offices, one storage facility, and thirteen equipment leases expiring on various dates through December 31, 2058. The leases are accounted for as operating leases. The minimum rental payments required under these leases are $99.4 million through the year 2058.

We have retirement plan agreements with certain directors and officers. At December 31, 2019, the accrued benefits under the plan were approximately $1.1 million, with a minimum age of 65 established to qualify for the payments.

Interest Rate Risk Management

We attempt to manage our assets and liabilities in a manner that optimizes net interest income in a range of interest rate environments. Management uses an "interest sensitivity gap" ("GAP") analysis and simulation models to monitor behavior of its interest sensitive assets and liabilities. A GAP analysis is the difference between interest-sensitive assets and interest-sensitive liabilities. Adjustments to the mix of assets and liabilities are made periodically in an effort to provide steady growth in net interest income.

Management presently believes that the effect of any future reduction in interest rates, reflected in lower yielding assets, could be detrimental since we may not have the immediate ability to commensurately decrease rates on interest bearing liabilities, primarily time deposits, other borrowings and certain transaction accounts. An increase in interest rates could have a negative effect due to a possible lag in the re-pricing of core deposits not taken into account in the static GAP analysis. Interest rate risk management involves managing the extent to which interest-sensitive assets and interest-sensitive liabilities are matched. We attempt to optimize net interest income while managing period-to-period fluctuations therein. We typically define interest-sensitive assets and interest-sensitive liabilities as those that re-price within one year or less. Generally, we limit long-term fixed rate assets and liabilities in our efforts to manage interest rate risk.

A positive GAP occurs when interest-sensitive assets exceed interest-sensitive liabilities re-pricing in the same time periods, and a negative GAP occurs when interest-sensitive liabilities exceed interest-sensitive assets re-pricing in the same time periods. A negative GAP ratio suggests that a financial institution may be better positioned to take advantage of declining interest rates rather than increasing interest rates, and a positive GAP ratio suggests the converse. Static GAP analysis describes interest rate sensitivity at a point in time. However, it alone does not accurately measure the magnitude of changes in net interest income as changes in interest rates do not impact all categories of assets and liabilities equally or simultaneously. Interest rate sensitivity analysis also requires assumptions about re-pricing certain categories of assets and liabilities. For purposes of interest rate sensitivity analysis, assets and liabilities are stated at their contractual maturity, estimated likely call date, or earliest re-pricing opportunity. Mortgage-backed securities and amortizing loans are scheduled based on their anticipated cash flow, including prepayments based on historical data and current market trends. Savings, money market and interest-bearing demand accounts do not have a stated maturity or re-pricing term and can be withdrawn or re-priced at any time. Management estimates the re-pricing characteristics of these accounts based upon decay rates and run off projections obtained in a deposit study performed by an independent third party, along with management's estimates of when rates would have to be increased to retain balances in response to competition. Such estimates are necessarily arbitrary and wholly judgmental. As a result of the run off projections, these deposits are not considered to re-price simultaneously and, accordingly, a portion of the deposits are moved into time brackets exceeding one year. However, management may choose not to re-price liabilities proportionally to changes in market interest rates, for competitive or other reasons.

Shortcomings, inherent in a simplified and static GAP analysis, may result in an institution with a negative GAP having interest rate behavior associated with an asset-sensitive balance sheet. For example, although certain assets and liabilities may have similar maturities or periods to re-pricing, they may react in different degrees to changes in market interest rates. Furthermore, re-pricing characteristics of certain assets and liabilities may vary substantially within a given time period. In the event of a change in interest rates, prepayments and other cash flows could also deviate significantly from those assumed in calculating GAP in the manner presented in the table below.

The following tables present a summary of our GAP analysis at December 31, 2019. Amounts shown in the table include both estimated maturities and instruments scheduled to re-price, including prime based loans. For purposes of these tables, we have used assumptions based on industry data and historical experience to calculate the expected maturity of loans because, statistically, certain categories of loans are prepaid before their maturity date, even without regard to interest rate fluctuations. Additionally, certain prepayment assumptions were made with regard to investment securities based upon the expected prepayment of the underlying collateral of the mortgage-backed securities.

Interest Rate Sensitivity Gap
As of December 31, 2019

(dollars in thousands)	0 – 90 Days	91-180 Days	181-365 Days	1-2 Years	2-3 Years	3-5 Years	More than 5 Years	Financial Statement Total	Fair Value
Interest sensitive assets:									
Investment securities and other interest-bearing balances	$ 301,719	$ 96,337	$ 121,419	$ 163,180	$ 116,077	$ 167,639	$ 357,490	$ 1,323,861	$ 1,322,292
Loans receivable	401,153	73,232	148,363	248,266	208,621	358,606	300,688	1,738,929	1,731,876
Total	$ 702,872	$ 169,569	$ 269,782	$ 411,446	$ 324,698	$ 526,245	$ 658,178	$ 3,062,790	$ 3,054,168
Cumulative totals	$ 702,872	$ 872,441	$ 1,142,223	$1,553,669	$ 1,878,367	$ 2,404,612	$ 3,062,790		
Interest sensitive liabilities:									
Demand interest bearing[(1)]	$ 1,352,360	$ -	$ -	$ -	$ -	$ -	-	$ 1,352,360	$ 1,352,360
Savings accounts[(1)]	216,793	-	-	-	-	-	-	216,793	216,793
Money market accounts[(1)]	545,000	-	-	-	-	-	-	545,000	545,000
Time deposits	32,414	72,487	65,661	50,079	1,130	1,808	-	223,579	224,095
Subordinated debt	11,265	-	-	-	-	-	-	11,265	8,540
Total	$ 2,157,832	$ 72,487	$ 65,661	$ 50,079	$ 1,130	$ 1,808	-	$ 2,348,997	$ 2,346,788
Cumulative totals	$ 2,157,832	$ 2,230,319	$ 2,295,980	$2,346,059	$ 2,347,189	$ 2,348,997	2,348,997		
Interest rate sensitivity GAP	$ (1,454,960)	$ 97,082	$ 204,121	$ 361,367	$ 323,568	$ 524,437	658,178		
Cumulative GAP	$ (1,454,960)	$(1,357,878)	$ (1,153,757)	$ (792,390)	$ (468,822)	$ 55,615	713,793		
Interest sensitive assets/Interest sensitive liabilities	32.57%	39.12%	49.75%	66.22%	80.03%	102.37%	130.39%		
Cumulative GAP/ Total earning assets	(47.50)%	(44.33)%	(37.67)%	(25.87)%	(15.31)%	1.82%	23.31%		

(1) Demand, savings and money market accounts are scheduled to reprice based upon decay rate and run off percentage estimates obtained through a deposit study performed by an independent third party, along with management's estimates of when rates would have to be increased to retain balances in response to competition. Such estimates are necessarily arbitrary and wholly judgmental.

In addition to the GAP analysis, we utilize income simulation modeling in measuring our interest rate risk and managing our interest rate sensitivity. Income simulation considers not only the impact of changing market interest rates on forecasted net interest income, but also other factors such as yield curve relationships, the volume and mix of assets and liabilities and general market conditions.

Net Portfolio Value and Net Interest Income Analysis

The income simulation models management used to measure interest rate risk and manage interest rate sensitivity generates estimates of the change in net portfolio value (NPV) and net interest income (NII) over a range of interest rate scenarios. NPV is the present value of expected cash flows from assets, liabilities, and off-balance sheet contracts. The NPV ratio, under any interest rate scenario, is defined as the NPV in that scenario divided by the market value of assets in the same scenario. The following table sets forth our NPV as of December 31, 2019 and reflects the changes to NPV as a result of immediate and sustained changes in interest rates as indicated (dollars in thousands):

Change in Interest Rates in Basis Points (Rate Shock)	Net Portfolio Value			NPV as a % of Portfolio Value of Assets	
	Amount	$ Change	% Change	NPV Ratio	Change (in Basis Points)
+400	$ 498,587	$ (28,681)	(5.44)%	17.04%	120
+300	533,717	6,449	1.22%	17.60%	176
+200	555,758	28,490	5.40%	17.72%	188
+100	560,188	32,920	6.24%	17.29%	145
Static	527,268	-	0.00%	15.84%	-
-100	464,134	(63,134)	(11.97)%	13.65%	(219)

In addition to modeling changes in NPV, we also analyze potential changes to NII for a forecasted twelve-month period under rising and falling interest rate scenarios. The following table shows the NII model as of December 31, 2019 (dollars in thousands):

Change in Interest Rates in Basis Points(1)	Net Interest Income	$ Change	% Change
+400	$ 81,477	(2,125)	(2.54)%
+300	83,011	(591)	(0.71)%
+200	84,132	530	0.63%
+100	84,782	1,180	1.41%
Static	83,602	-	0.00%
-100	80,201	(3,401)	(4.06)%

(1) The net interest income results were calculated assuming a rate ramp, achieving the rate change over a 12-month period, not an immediate and sustained rate shock.

As is the case with the GAP table, certain shortcomings are inherent in the methodology used in the above interest rate risk measurements. Modeling changes in NPV and NII require the making of certain assumptions, which may or may not reflect the manner in which actual yields and costs respond to changes in market interest rates. In this regard, the models presented assume that the composition of our interest sensitive assets and liabilities existing at the beginning of a period remains constant over the period being measured and also assumes that a particular change in interest rates is reflected uniformly across the yield curve regardless of the duration to maturity or re-pricing of specific assets and liabilities. Accordingly, although the NPV measurements and net interest income models provide an indication of interest rate risk exposure at a particular point in time, such measurements are not intended to and do not provide a precise forecast of the effect of changes in market interest rates on net interest income and will differ from actual results.

Management believes that the assumptions utilized in evaluating our estimated net interest income are reasonable. However, the interest rate sensitivity of our assets, liabilities and off-balance sheet financial instruments as well as the estimated effect of changes in interest rates on estimated net interest income could vary substantially if different assumptions are used or actual experience differs from the experience on which the assumptions were based. Periodically, we may and do make significant changes to underlying assumptions, which are wholly judgmental. Prepayments on residential mortgage loans and mortgage-backed securities have increased over historical levels in recent years due to the lower interest rate environment, and may result in reductions in margins.

Capital Resources

We have sponsored two outstanding issues of corporation-obligated mandatorily redeemable capital securities of a subsidiary trust holding solely junior subordinated debentures of the Corporation more commonly known as trust preferred securities. The subsidiary trusts are not consolidated for financial reporting purposes. The purpose of the issuances of these securities was to increase capital. The trust preferred securities qualify as Tier 1 capital for regulatory purposes in amounts up to 25% of total Tier 1 capital.

On December 27, 2006, Republic Capital Trust II (Trust II) issued \$6.0 million of trust preferred securities to investors and \$0.2 million of common securities to us. Trust II purchased \$6.2 million of our floating rate junior subordinated debentures due 2037, and we used the proceeds to call the securities of Republic Capital Trust I (Trust I). The debentures purchased by Trust II have a variable interest rate, adjustable quarterly, at 1.73% over the 3-month LIBOR. We may redeem the debentures on any interest payment date without a prepayment penalty.

On June 28, 2007, Republic Capital Trust III (Trust III), issued \$5.0 million of trust preferred securities to one investor and \$0.2 million common securities to us. Trust III purchased \$5.2 million of our floating rate junior subordinated debentures due 2037, which have a variable interest rate, adjustable quarterly, at 1.55% over the 3 month LIBOR. We have the ability to redeem the debentures on any interest payment date without a prepayment penalty.

On June 10, 2008, Republic First Bancorp Capital Trust IV (Trust IV) issued \$10.8 million of convertible trust preferred securities as part of our strategic capital plan. The securities were purchased by investors, including Vernon W. Hill, II, founder and chairman (retired) of Commerce Bancorp, and as of December 5, 2016, our chairman. The investor group also included a family trust of Harry D. Madonna, chairman, president and chief executive officer of Republic Bank, and Theodore J. Flocco, Jr., who has been elected by the shareholders to our Board of Directors and serves as the Chairman of our Audit Committee. Trust IV also issued \$0.3 million of common securities to us. Trust IV purchased \$11.1 million of our fixed rate junior subordinated convertible debentures due 2038, which paid interest at an annual rate of 8.0% and were considered redeemable on any interest payment date (a) at any time on or after June 13, 2013 if the closing price of our common stock for 20 trading days in the period of 30 consecutive trading days ending on the trading day prior to the mailing of the notice of redemption exceeds 120% of the then-applicable conversion price, or (b) on or after June 30, 2018, without a prepayment penalty. The trust preferred securities of Trust IV were convertible into approximately 1.7 million shares of our common stock, which is subject to customary adjustments. One independent director converted \$240,000 of trust preferred securities into 37,000 shares of common stock in 2017. On January 31, 2018, we notified the existing holders of its intent to fully redeem these securities in accordance with the Optional Redemption terms included in the Indenture Agreement. The remaining securities were redeemed on March 31, 2018 at a price equal to the outstanding principal amount. After redemption of the remaining securities, Trust IV was dissolved.

Deferred issuance costs included in subordinated debt were $76,000 and $82,000 at December 31, 2019 and December 31, 2018, respectively. Amortization of deferred issuance costs were $6,000, $6,000, and $29,000 for the years ended December 31, 2019, 2018, and 2017, respectively. Deferred issuance costs in the amount of $467,000 were recorded against additional paid in capital during the first quarter of 2018 as a result of the conversion of trust preferred securities into common stock in accordance with ASC 470-20.

Shareholders' equity as of December 31, 2019 totaled approximately $249.2 million compared to approximately $245.2 million as of December 31, 2018. The book value per share of our common stock increased to $4.23 as of December 31, 2019, based upon 58,842,778 shares outstanding, from $4.17 as of December 31, 2018, based upon 58,789,228 shares outstanding at December 31, 2018. Outstanding shares are adjusted for treasury stock and deferred compensation plan shares.

Regulatory Capital Requirements

We are required to comply with certain "risk-based" capital adequacy guidelines issued by the FRB and the FDIC. The risk-based capital guidelines assign varying risk weights to the individual assets held by a bank. The guidelines also assign weights to the "credit-equivalent" amounts of certain off-balance sheet items, such as letters of credit and interest rate and currency swap contracts.

Under the capital rules, risk-based capital ratios are calculated by dividing common equity Tier 1, Tier 1, and total risk-based capital, respectively, by risk-weighted assets. Assets and off-balance sheet credit equivalents are assigned to one of several categories of risk-weights, based primarily on relative risk. Under applicable capital rules, Republic is required to maintain a minimum common equity Tier 1 capital ratio requirement of 4.5%, a minimum Tier 1 capital ratio requirement of 6%, a minimum total capital requirement of 8% and a minimum leverage ratio requirement of 4%. Under the rules, in order to avoid limitations on capital distributions (including dividend payments and certain discretionary bonus payments to executive officers), a banking organization must hold a capital conservation buffer comprised of common equity Tier 1 capital above its minimum risk-based capital requirements in an amount greater than 2.5% of total risk-weighted assets. The capital conservation buffer, which is composed of common equity Tier 1 capital, began on January 1, 2016 at the 0.625% level and was phased in over a three year period (increasing by that amount on each January 1, until it reached 2.5% on January 1, 2019). Implementation of the deductions and other adjustments to common equity Tier 1 capital began on January 1, 2015 and were phased-in over a three-year period.

The following table shows the required capital ratios with the conservation buffer over the phase-in period.

	Basel III Community Banks Minimum Capital Ratio Requirements			
	2016	2017	2018	2019
Common equity tier 1 capital (CET1)	5.125%	5.750%	6.375%	7.000%
Tier 1 capital (to risk weighted assets)	6.625%	7.250%	7.875%	8.500%
Total capital (to risk-weighted assets)	8.625%	9.250%	9.875%	10.500%

The risk-based capital ratios measure the adequacy of a bank's capital against the riskiness of its assets and off-balance sheet activities. Failure to maintain adequate capital is a basis for "prompt corrective action" or other regulatory enforcement action. In assessing a bank's capital adequacy, regulators also consider other factors such as interest rate risk exposure; liquidity, funding and market risks; quality and level or earnings; concentrations of credit, quality of loans and investments; risks of any nontraditional activities; effectiveness of bank policies; and management's overall ability to monitor and control risks.

Management believes that the Company and Republic met, as of December 31, 2019 and 2018, all capital adequacy requirements under the Basel III Capital Rules on a fully phased-in basis as if all such requirements were currently in effect. In the current year, the FDIC categorized Republic as well capitalized under the regulatory framework for prompt corrective action provisions of the Federal Deposit Insurance Act. There are no calculations or events since that notification which management believes would have changed Republic's category.

The Company and Republic's ability to maintain the required levels of capital is substantially dependent upon the success of their capital and business plans, the impact of future economic events on Republic's loan customers and Republic's ability to manage its interest rate risk, growth and other operating expenses.

The following table presents the Company's and Republic's capital regulatory ratios calculated based on Basel III guidelines at December 31, 2019 and 2018:

(dollars in thousands)	Actual		Minimum Capital Adequacy		Minimum Capital Adequacy with Capital Buffer		To Be Well Capitalized Under Prompt Corrective Action Provisions	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
At December 31, 2019:								
Total risk based capital								
Republic	$ 252,307	11.94 %	$ 169,016	8.00 %	$ 221,833	10.50 %	$ 211,270	10.00 %
Company	261,759	12.37 %	169,251	8.00 %	222,141	10.50 %	-	- %
Tier one risk based								
Republic	243,041	11.50 %	126,762	6.00 %	179,579	8.50 %	169,016	8.00 %
Company	252,493	11.93 %	126,938	6.00 %	179,829	8.50 %	-	- %
CET 1 risk based capital								
Republic	243,041	11.50 %	95,071	4.50 %	147,889	7.00 %	137,325	6.50 %
Company	241,493	11.41 %	95,203	4.50 %	148,094	7.00 %	-	- %
Tier one leveraged capital								
Republic	245,158	7.54 %	128,935	4.00 %	128,935	4.00 %	161,169	5.00 %
Company	249,168	7.83 %	129,058	4.00 %	129,058	4.00 %	-	- %
At December 31, 2018:								
Total risk based capital								
Republic	$ 231,610	13.26 %	$ 139,722	8.00 %	$ 172,489	9.875 %	$ 174,652	10.00 %
Company	262,964	15.03 %	140,009	8.00 %	172,824	9.875 %	-	- %
Tier one risk based								
Republic	222,995	12.77 %	104,791	6.00 %	137,539	7.875 %	139,722	8.00 %
Company	254,349	14.53 %	105,007	6.00 %	137,821	7.875 %	-	- %
CET 1 risk based capital								
Republic	222,995	12.77 %	78,594	4.50 %	111,341	6.375 %	113,524	6.50 %
Company	243,349	13.90 %	78,755	4.50 %	111,570	6.375 %	-	- %
Tier one leveraged capital								
Republic	222,995	8.21 %	108,685	4.00 %	108,685	4.00 %	135,857	5.00 %
Company	254,349	9.35 %	108,800	4.00 %	108,800	4.00 %	-	- %

Liquidity

A financial institution must maintain and manage liquidity to ensure it has the ability to meet its financial obligations. These obligations include the payment of deposits on demand or at their contractual maturity; the repayment of borrowings as they mature; the payment of lease obligations as they become due; the ability to fund new and existing loans and other funding commitments; and the ability to take advantage of new business opportunities. Liquidity needs can be met by either reducing assets or increasing liabilities. Our most liquid assets consist of cash, amounts due from banks and federal funds sold.

Regulatory authorities require us to maintain certain liquidity ratios in order for funds to be available to satisfy commitments to borrowers and the demands of depositors. In response to these requirements, we have formed an asset/liability committee (ALCO), comprised of certain members of Republic's Board of Directors and senior management to monitor such ratios. The ALCO committee is responsible for managing the liquidity position and interest sensitivity. That committee's primary objective is to maximize net interest income while configuring Republic's interest-sensitive assets and liabilities to manage interest rate risk and provide adequate liquidity for projected needs. The ALCO committee meets on a quarterly basis or more frequently if deemed necessary.

Our target and actual liquidity levels are determined by comparisons of the estimated repayment and marketability of interest-earning assets with projected future outflows of deposits and other liabilities. Our most liquid assets, comprised of cash and cash equivalents on the balance sheet, totaled $168.3 million at December 31, 2019, compared to $72.5 million at December 31, 2018. Loan maturities and repayments are another source of asset liquidity. At December 31, 2019, Republic estimated that more than $100 million of loans would mature or repay in the six-month period ending June 30, 2020. Additionally, a significant portion of our investment securities are available to satisfy liquidity requirements through sales on the open market or by pledging as collateral to access credit facilities. At December 31, 2019, we had outstanding commitments (including unused lines of credit and letters of credit) of $347.1 million. Certificates of deposit scheduled to mature in one year totaled $170.6 million at December 31, 2019. We anticipate that we will have sufficient funds available to meet all current commitments.

Daily funding requirements have historically been satisfied by generating core deposits and certificates of deposit with competitive rates, buying federal funds or utilizing the credit facilities of the FHLB. We have established a line of credit with the FHLB of Pittsburgh. Our maximum borrowing capacity with the FHLB was $860.5 million at December 31, 2019. As of December 31, 2019, we had no outstanding overnight borrowings. At December 31, 2019, FHLB had issued a letter on Republic's behalf, totaling $150.0 million against our available credit. As of December 31, 2018, we had outstanding overnight borrowings of $91.4 million at an interest rate of 2.65%. At December 31, 2018, FHLB had issued a letter on Republic's behalf, totaling $100.0 million against our available credit. We also established a contingency line of credit of $10.0 million with ACBB and a Fed Funds line of credit with Zions Bank in the amount of $15.0 million to assist in managing our liquidity position. We had no amounts outstanding against the ACBB line of credit or the Zions Fed Funds line at both December 31, 2019 and December 31, 2018.

Variable Interest Entities

We follow the guidance under ASC 810, *Consolidation*, with regard to variable interest entities. ASC 810 clarifies the application of consolidation principles for certain legal entities in which voting rights are not effective in identifying the investor with the controlling financial interest. An entity is subject to consolidation under ASC 810 if the investors do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support, are unable to direct the entity's activities, or are not exposed to the entity's losses or entitled to its residual returns ("variable interest entities"). Variable interest entities within the scope of ASC 810 will be required to be consolidated by their primary beneficiary. The primary beneficiary of a variable interest entity is determined to be the party that absorbs a majority of the entity's expected losses, receives a majority of its expected returns, or both.

We do not consolidate our subsidiary trusts. ASC 810 precludes consideration of the call option embedded in the preferred securities when determining if we have the right to a majority of the trusts' expected residual returns. The non-consolidation results in the investment in the common securities of the trusts to be included in other assets with a corresponding increase in outstanding debt of $341,000. In addition, the income received on our investment in the common securities of the trusts is included in other income.

Effects of Inflation

The majority of assets and liabilities of a financial institution are monetary in nature. Therefore, a financial institution differs greatly from most commercial and industrial companies that have significant investments in fixed assets or inventories. Management believes that the most significant impact of inflation on financial results is our need and ability to react to changes in interest rates. As discussed previously, management attempts to maintain an essentially balanced position between rate sensitive assets and liabilities over a one-year time horizon in order to protect net interest income from being affected by wide interest rate fluctuations.

Item 7A: Quantitative and Qualitative Disclosure about Market Risk

See "Management Discussion and Analysis of Results of Operations and Financial Condition – Interest Rate Risk Management".

Item 8: Financial Statements and Supplementary Data

The Consolidated Financial Statements of the Company begin on page 77.

BDO

Tel: 215-564-1900
Fax: 215-564-3940
www.bdo.com

Ten Penn Center
1801 Market Street, Suite 1700
Philadelphia, PA 19103

Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Republic First Bancorp, Inc.
Philadelphia, Pennsylvania

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Republic First Bancorp, Inc. (the "Company") and subsidiaries as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income, changes in shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company and subsidiaries at December 31, 2019 and 2018, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2019, in conformity with accounting principles generally accepted in the United States of America.

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, 2019, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission ("COSO") and our report dated March 16, 2020 expressed an unqualified opinion thereon.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.

Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

BDO USA, LLP

Philadelphia, Pennsylvania
March 16, 2020

We have served as the Company's auditor since 2013.

Republic First Bancorp, Inc. and Subsidiaries
Consolidated Balance Sheets
December 31, 2019 and 2018
(Dollars in thousands, except per share data)

	December 31, 2019	December 31, 2018
ASSETS		
Cash and due from banks	$ 41,928	$ 35,685
Interest bearing deposits with banks	126,391	36,788
Cash and cash equivalents	168,319	72,473
Investment securities available for sale, at fair value	539,042	321,014
Investment securities held to maturity, at amortized cost (fair value of $653,109 and $747,323, respectively)	644,842	761,563
Restricted stock, at cost	2,746	5,754
Mortgage loans held for sale, at fair value	10,345	20,887
Other loans held for sale	3,004	5,404
Loans receivable (net of allowance for credit losses of $9,266 and $8,615, respectively)	1,738,929	1,427,983
Premises and equipment, net	116,956	87,661
Other real estate owned, net	1,730	6,223
Accrued interest receivable	9,934	9,025
Operating lease right-of-use asset	64,805	-
Goodwill	5,011	5,011
Other assets	35,627	30,299
Total Assets	$ 3,341,290	$ 2,753,297
LIABILITIES AND SHAREHOLDERS' EQUITY		
Liabilities		
Deposits		
Demand – non-interest bearing	$ 661,431	$ 519,056
Demand – interest bearing	1,352,360	1,042,561
Money market and savings	761,793	676,993
Time deposits	223,579	154,257
Total Deposits	2,999,163	2,392,867
Short-term borrowings	-	91,422
Accrued interest payable	1,630	558
Other liabilities	11,208	12,002
Operating lease liability	68,856	-
Subordinated debt	11,265	11,259
Total Liabilities	3,092,122	2,508,108
Shareholders' Equity		
Preferred stock, par value $0.01 per share: 10,000,000 shares authorized; no shares issued and outstanding	-	-
Common stock, par value $0.01 per share: 100,000,000 shares authorized; shares issued 59,371,623 as of December 31, 2019 and 59,318,073 as of December 31, 2018; shares outstanding 58,842,778 as of December 31, 2019 and 58,789,228 as of December 31, 2018	594	593
Additional paid in capital	272,039	269,147
Accumulated deficit	(12,216)	(8,716)
Treasury stock at cost (503,408 shares as of December 31, 2019 and December 31, 2018)	(3,725)	(3,725)
Stock held by deferred compensation plan (25,437 shares as of December 31, 2019 and December 31, 2018)	(183)	(183)
Accumulated other comprehensive loss	(7,341)	(11,927)
Total Shareholders' Equity	249,168	245,189
Total Liabilities and Shareholders' Equity	$ 3,341,290	$ 2,753,297

(See notes to consolidated financial statements)

Republic First Bancorp, Inc. and Subsidiaries
Consolidated Statements of Operations
For the Years Ended December 31, 2019, 2018, and 2017
(Dollars in thousands, except per share data)

	Years Ended December 31,		
	2019	2018	2017
Interest income			
Interest and fees on taxable loans	$ 72,808	$ 62,502	$ 48,993
Interest and fees on tax-exempt loans	1,689	1,543	1,101
Interest and dividends on taxable investment securities	27,459	26,677	19,643
Interest and dividends on tax-exempt investment securities	337	505	535
Interest on federal funds sold and other interest-earning assets	2,571	847	577
Total interest income	104,864	92,074	70,849
Interest expense			
Demand- interest bearing	15,621	7,946	3,020
Money market and savings	6,796	4,898	3,160
Time deposits	3,850	1,588	1,238
Other borrowings	790	1,738	1,366
Total interest expense	27,057	16,170	8,784
Net interest income	77,807	75,904	62,065
Provision for loan losses	1,905	2,300	900
Net interest income after provision for loan losses	75,902	73,604	61,165
Non-interest income			
Loan and servicing fees	1,568	1,401	1,614
Mortgage banking income	10,125	10,233	11,170
Gain on sales of SBA loans	3,187	3,105	3,378
Service fees on deposit accounts	7,541	5,476	3,904
Gain (loss) on sale of investment securities	1,103	(67)	(146)
Other non-interest income	214	174	177
Total non-interest income	23,738	20,322	20,097
Non-interest expenses			
Salaries and employee benefits	53,888	44,082	37,959
Occupancy	11,565	8,046	7,156
Depreciation and amortization	6,482	5,447	4,618
Legal	1,335	985	984
Other real estate owned	2,109	1,588	4,092
Appraisal and other loan expenses	1,829	1,840	1,878
Advertising	1,930	1,211	1,279
Data processing	5,220	3,855	3,134
Insurance	1,070	996	982
Professional fees	2,589	2,048	1,893
Debit card processing	2,467	1,868	1,264
Regulatory assessments and costs	1,228	1,675	1,367
Taxes, other	837	796	817
Other operating expenses	11,941	9,284	7,853
Total non-interest expense	104,490	83,721	75,276
Income (loss) before benefit for income taxes	(4,850)	10,205	5,986
Provision (benefit) for income taxes	(1,350)	1,578	(2,919)
Net income (loss)	$ (3,500)	$ 8,627	$ 8,905
Net income (loss) per share			
Basic	$ (0.06)	$ 0.15	$ 0.16
Diluted	$ (0.06)	$ 0.15	$ 0.15

(See notes to consolidated financial statements)

Republic First Bancorp, Inc. and Subsidiaries
Consolidated Statements of Comprehensive Income
For the Years Ended December 31, 2019, 2018, and 2017
(Dollars in thousands)

	Years Ended December 31,		
	2019	2018	2017
Net income (loss)	$ (3,500)	$ 8,627	$ 8,905
Other comprehensive, net of tax			
Unrealized gain/(loss) on securities (pre-tax $5,120, $5,364, and $(646), respectively)	4,284	3,927	(413)
Reclassification adjustment for securities losses (gains) (pre-tax $(1,103), $67 and $146, respectively)	(823)	49	94
Net unrealized gains/(losses) on securities	3,461	3,976	(319)
Net unrealized holding losses on securities transferred from available-for-sale to held-to-maturity (pre-tax $-, $(9,362), $-, respectively)	-	(6,855)	-
Amortization of net unrealized holding losses during the period (pre-tax $1,658, $137, and $163, respectively)	1,125	101	104
Total other comprehensive income (loss)	4,586	(2,778)	(215)
Total comprehensive income	$ 1,086	$ 5,849	$ 8,690

(See notes to consolidated financial statements)

Republic First Bancorp, Inc. and Subsidiaries
Consolidated Statements of Cash Flows
For the Years Ended December 31, 2019, 2018, and 2017
(Dollars in thousands)

	2019	2018	2017
Cash flows from operating activities			
Net (loss) income	$ (3,500)	$ 8,627	$ 8,905
Adjustments to reconcile net (loss) income to net cash provided by (used in) operating activities:			
Provision for loan losses	1,905	2,300	900
Write down of other real estate owned	286	563	3,000
Depreciation and amortization	6,482	5,447	4,618
Deferred income taxes	1,744	1,527	(5,056)
Stock based compensation	2,632	2,116	1,842
Loss (gain) on sale of investment securities	(1,103)	67	146
Amortization of premiums on investment securities	3,730	2,878	2,469
Accretion of discounts on retained SBA loans	(1,411)	(1,332)	(1,088)
Fair value adjustments on SBA servicing assets	1,364	1,458	1,187
Proceeds from sales of SBA loans originated for sale	46,951	42,726	42,269
SBA loans originated for sale	(41,364)	(42,700)	(37,062)
Gains on sales of SBA loans originated for sale	(3,187)	(3,105)	(3,378)
Proceeds from sales of mortgage loans originated for sale	335,991	322,264	311,187
Mortgage loans originated for sale	(317,881)	(291,870)	(321,222)
Fair value adjustment for mortgage loans originated for sale	454	513	(846)
Gains on mortgage loans originated for sale	(8,117)	(8,378)	(8,128)
Amortization of intangible assets	-	-	61
Amortization of debt issuance costs	6	6	29
Non-cash expense related to leases	1,128	-	-
Increase in accrued interest receivable and other assets	(8,464)	(5,047)	(2,330)
Net increase in accrued interest payable and other liabilities	1,687	1,570	1,513
Net cash provided by (used in) operating activities	19,333	39,630	(984)
Cash flows from investing activities			
Purchase of investment securities available for sale	(338,500)	(149,209)	(165,065)
Purchase of investment securities held to maturity	-	(123,265)	(89,350)
Proceeds from the sale of securities available for sale	54,742	6,439	31,197
Proceeds from the paydown, maturity, or call of securities available for sale	69,012	48,796	48,547
Proceeds from the paydown, maturity, or call of securities held to maturity	116,486	63,565	37,315
Net redemption (purchase) of restricted stock	3,008	(3,836)	(552)
Net increase in loans	(312,665)	(275,587)	(197,965)
Net proceeds from sale of other real estate owned	5,072	495	499
Premises and equipment expenditures	(35,777)	(18,161)	(22,525)
Net cash used in investing activities	(438,622)	(450,763)	(357,899)
Cash flows from financing activities			
Net proceeds from exercise of stock options	261	670	646
Net increase in demand, money market and savings deposits	536,974	292,053	380,052
Net increase in time deposits	69,322	37,519	5,573
Increase (repayment) in short-term borrowings	(91,422)	91,422	-
Net cash provided by financing activities	515,135	421,664	386,271
Net increase in cash and cash equivalents	95,846	10,531	27,388
Cash and cash equivalents, beginning of year	72,473	61,942	34,554
Cash and cash equivalents, end of year	$ 168,319	$ 72,473	$ 61,942
Supplemental disclosures			
Interest paid	$ 25,985	$ 15,905	$ 8,935
Income taxes paid	$ -	$ -	$ 75
Non-cash transfers from loans to other real estate owned	$ 1,225	$ 315	$ 291
Conversion of subordinated debt to common stock	$ -	$ 10,094	$ 229
Transfer of available-for-sale securities to held-to-maturity securities	$ -	$ 230,094	$ -

(See notes to consolidated financial statements)

Republic First Bancorp, Inc. and Subsidiaries
Consolidated Statements of Changes in Shareholders' Equity
For the Years Ended December 31, 2019, 2018, and 2017
(Dollars in thousands)

	Common Stock	Additional Paid in Capital	Accumulated Deficit	Treasury Stock	Stock Held by Deferred Compensation Plan	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
Balance January 1, 2017	$ 573	$ 253,570	$ (27,888)	$ (3,725)	$ (183)	$ (7,294)	$ 215,053
Net income			8,905				8,905
Other comprehensive loss, net of tax						(215)	(215)
Stock based compensation		1,842					1,842
Conversion of subordinated debt to common stock (36,922 shares)		229					229
Options exercised (197,975 shares)	2	644					646
Balance December 31, 2017	575	256,285	(18,983)	(3,725)	(183)	(7,509)	226,460
Reclassification due to the adoption of ASU 2018-02			1,640			(1,640)	-
Net income			8,627				8,627
Other comprehensive loss, net of tax						(2,778)	(2,778)
Stock based compensation		2,116					2,116
Conversion of subordinated debt to common stock (1,624,614 shares)	16	10,078					10,094
Options exercised (174,850 shares)	2	668					670
Balance December 31, 2018	593	269,147	(8,716)	(3,725)	(183)	(11,927)	245,189
Net loss			(3,500)				(3,500)
Other comprehensive income, net of tax						4,586	4,586
Stock based compensation		2,632					2,632
Options exercised (53,550 shares)	1	260					261
Balance December 31, 2019	$ 594	$ 272,039	$ (12,216)	$ (3,725)	$ (183)	$ (7,341)	$ 249,168

(See notes to consolidated financial statements)

Republic First Bancorp, Inc. and Subsidiaries
Notes to Consolidated Financial Statements

1. Nature of Operations

Republic First Bancorp, Inc. (the “Company”) is a one-bank holding company organized and incorporated under the laws of the Commonwealth of Pennsylvania. It is comprised of one wholly-owned subsidiary, Republic First Bank, which does business under the name of Republic Bank (“Republic”). Republic is a Pennsylvania state chartered bank that offers a variety of banking services to individuals and businesses throughout the Greater Philadelphia, Southern New Jersey, and New York City markets through its offices and store locations in Philadelphia, Montgomery, Delaware, Bucks, Camden, Burlington, Atlantic, Gloucester, and New York Counties. On July 28, 2016, Republic acquired all of the issued and outstanding limited liability company interests of Oak Mortgage Company, LLC (“Oak Mortgage”) and, as a result, Oak Mortgage became a wholly owned subsidiary of Republic on that date. Oak Mortgage is headquartered in Marlton, NJ and is licensed to do business in Pennsylvania, Delaware, New Jersey, and Florida. On January 1, 2018, Oak Mortgage was merged into Republic and restructured as a division of Republic. The Oak Mortgage name is still utilized for marketing and branding purposes. The Company also has two unconsolidated subsidiaries, which are statutory trusts established by the Company in connection with its sponsorship of two separate issuances of trust preferred securities.

The Company and Republic encounter vigorous competition for market share in the geographic areas they serve from bank holding companies, national, regional and other community banks, thrift institutions, credit unions and other non-bank financial organizations, such as mutual fund companies, insurance companies and brokerage companies.

The Company and Republic are subject to federal and state regulations governing virtually all aspects of their activities, including but not limited to, lines of business, liquidity, investments, the payment of dividends and others. Such regulations and the cost of adherence to such regulations can have a significant impact on earnings and financial condition.

2. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements include the accounts of the Company and its wholly-owned subsidiary, Republic. The Company follows accounting standards set by the Financial Accounting Standards Board (“FASB”). The FASB sets accounting principles generally accepted in the United States of America (“US GAAP”) that are followed to ensure consistent reporting of financial condition, results of operations, and cash flows. All material inter-company transactions have been eliminated. Events occurring subsequent to the date of the balance sheet have been evaluated for potential recognition or disclosure in the consolidated financial statements.

Risks and Uncertainties and Certain Significant Estimates

The earnings of the Company depend primarily on the earnings of Republic. The earnings of Republic are heavily dependent upon the level of net interest income, which is the difference between interest earned on its interest-earning assets, such as loans and investments, and the interest paid on its interest-bearing liabilities, such as deposits and borrowings. Accordingly, the Company’s results of operations are subject to risks and uncertainties surrounding Republic’s exposure to changes in the interest rate environment. Prepayments on residential real estate mortgage and other fixed rate loans and mortgage-backed securities vary significantly and may cause significant fluctuations in interest margins.

The preparation of financial statements in conformity with U.S. GAAP requires management to make significant estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

Significant estimates are made by management in determining the allowance for credit losses, carrying values of other real estate owned, assessment of other than temporary impairment ("OTTI") of investment securities, fair value of financial instruments, and the realization of deferred income tax assets. Consideration is given to a variety of factors in establishing these estimates.

Significant Group Concentrations of Credit Risk

Most of the Company's activities are with customers located within the Greater Philadelphia region. Note 3 – Investment Securities discusses the types of investment securities that the Company invests in. Note 4 – Loans Receivable discusses the types of lending that the Company engages in, as well as loan concentrations. The Company does not have a significant concentration of credit risk with any one customer.

Cash and Cash Equivalents

For purposes of the statements of cash flows, the Company considers all cash and due from banks, interest-bearing deposits with an original maturity of ninety days or less and federal funds sold, maturing in ninety days or less, to be cash and cash equivalents.

Restrictions on Cash and Due from Banks

Republic is required to maintain certain average reserve balances as established by the Federal Reserve Board. The amounts of those balances for the reserve computation periods that include December 31, 2019 and 2018 were approximately $57.2 million and $51.4 million, respectively. These requirements were satisfied through the restriction of vault cash and a balance held by the Federal Reserve Bank of Philadelphia.

Investment Securities

Held to Maturity – Certain debt securities that management has the positive intent and ability to hold until maturity are classified as held to maturity and are carried at their remaining unpaid principal balances, net of unamortized premiums or unaccreted discounts. Premiums are amortized and discounts are accreted using the interest method over the estimated remaining term of the underlying security.

Available for Sale – Debt securities that will be held for indefinite periods of time, including securities that may be sold in response to changes in market interest or prepayment rates, needs for liquidity, and changes in the availability of and in the yield of alternative investments, are classified as available for sale. These assets are carried at fair value. Unrealized gains and losses are excluded from operations and are reported net of tax as a separate component of other comprehensive income until realized. Realized gains and losses on the sale of investment securities are reported in the consolidated statements of income and determined using the adjusted cost of the specific security sold on the trade date.

Investment securities are evaluated on at least a quarterly basis, and more frequently when market conditions warrant such an evaluation, to determine whether a decline in their value is other-than-temporary. To determine whether a loss in value is other-than-temporary, management utilizes criteria such as the reasons underlying the decline, the magnitude and duration of the decline, the intent to hold the security and the likelihood of the Company not being required to sell the security prior to an anticipated recovery in the fair value. The term “other-than-temporary” is not intended to indicate that the decline is permanent, but indicates that the prospects for a near-term recovery of value is not necessarily favorable, or that there is a lack of evidence to support a realizable value equal to or greater than the carrying value of the investment. Once a decline in value is determined to be other-than-temporary, the portion of the decline related to credit impairment is charged to earnings.

Restricted Stock

Restricted stock, which represents a required investment in the capital stock of correspondent banks related to available credit facilities, was carried at cost as of December 31, 2019 and 2018. As of those dates, restricted stock consisted of investments in the capital stock of the FHLB of Pittsburgh and Atlantic Community Bankers Bank (“ACBB”). The required investment in the capital stock of the FHLB is calculated based on outstanding loan balances and open credit facilities with the FHLB. Excess investments are returned to Republic on a quarterly basis.

At December 31, 2019 and December 31, 2018, the investment in FHLB stock totaled \$2.6 million and \$5.6 million, respectively. The increase was due primarily to a higher membership stock requirement by FHLB at December 31, 2018 which resulted in a higher required investment as of that date. At both December 31, 2019 and December 31, 2018, ACBB stock totaled \$143,000.

Mortgage Banking Activities and Mortgage Loans Held for Sale

Mortgage loans held for sale are originated and held until sold to permanent investors. On July 28, 2016, management elected to adopt the fair value option in accordance with FASB Accounting Standards Codification (“ASC”) 820, *Fair Value Measurements and Disclosures*, and record loans held for sale at fair value.

Mortgage loans held for sale originated on or subsequent to the election of the fair value option, are recorded on the balance sheet at fair value. The fair value is determined on a recurring basis by utilizing quoted prices from dealers in such securities. Changes in fair value are reflected in mortgage banking income in the statements of income. Direct loan origination costs are recognized when incurred and are included in non-interest expense in the statements of income.

Interest Rate Lock Commitments

Mortgage loan commitments known as interest rate locks that relate to the origination of a mortgage that will be held for sale upon funding are considered derivative instruments under the derivatives and hedging accounting guidance FASB ASC 815, *Derivatives and Hedging*. Loan commitments that are classified as derivatives are recognized at fair value on the balance sheet as other assets and other liabilities with changes in their fair values recorded as mortgage banking income and included in non-interest income in the statements of income. Outstanding IRLCs are subject to interest rate risk and related price risk during the period from the date of issuance through the date of loan funding, cancellation or expiration. Loan commitments generally range between 30 and 90 days; however, the borrower is not obligated to obtain the loan. Republic is subject to fallout risk related to IRLCs, which is realized if approved borrowers choose not to close on the loans within the terms of the IRLCs. Republic uses best efforts commitments to substantially eliminate these risks. The valuation of the IRLCs issued by Republic includes the value of the servicing released premium. Republic sells loans where the servicing is released, and the servicing released premium is included in the market price. See Note 23 Derivatives and Risk Management Activities for further detail of IRLCs.

Best Efforts Forward Loan Sale Commitments

Best efforts forward loan sale commitments are commitments to sell individual mortgage loans at a fixed price to an investor at a future date. Best efforts forward loan sale commitments are accounted for as derivatives and carried at fair value, determined as the amount that would be necessary to settle the derivative financial instrument at the balance sheet date. Gross derivative assets and liabilities are recorded as other assets and other liabilities with changes in fair value during the period recorded as mortgage banking income and included in non-interest income in the statements of income.

Mandatory Forward Loan Sales Commitments

Mandatory forward loan sales commitments are based on fair values of the underlying mortgage loans and the probability of such commitments being exercised. Mandatory forward loan sale commitments are accounted for as derivatives and carried at fair value, determined as the amount that would be necessary to settle the derivative financial instrument at the balance sheet date. Gross derivative assets and liabilities are recorded as other assets and other liabilities with changes in fair value during the period recorded as mortgage banking income and included in non-interest income in the statements of income.

Goodwill

Goodwill represents the excess of cost over the identifiable net assets of businesses acquired. Goodwill is recognized as an asset and is to be reviewed for impairment annually and between annual tests when events and circumstances indicate that impairment may have occurred. Impairment is a condition that exists when the carrying amount of goodwill exceeds its implied fair value.

The Company has one reportable segment: Community Banking. The community banking segment primarily encompasses the commercial loan and deposit activities of the Bank, as well as, residential mortgage and consumer loan products in the area surrounding its stores. Oak Mortgage was acquired by the Bank on July 28, 2016 and organized as a wholly owned subsidiary of the Bank. Oak Mortgage was maintained as a separate legal entity through December 31, 2017 in order to preserve certain secondary market contracts and regulatory licensing requirements.

On January 1, 2018, Oak Mortgage operations were restructured as a division of Republic and all assets, liabilities, contracts, employees and activity were merged into the Republic. As a result of this restructuring, the Company re-evaluated its reporting unit structure and determined that as of July 31, 2018 there were no longer two reporting units but rather a sole reporting unit in Republic Bank. As of July 31, 2019, the Company elected to perform a Step One Test for goodwill impairment. The fair value of the reporting unit was higher than the book value and, therefore, no Step Two analysis was required. Goodwill totaled $5.0 million as of December 31, 2019 and 2018, respectively.

Loans Receivable

The loans receivable portfolio is segmented into commercial and industrial loans, commercial real estate loans, owner occupied real estate loans, construction and land development loans, consumer and other loans, and residential mortgages. Consumer loans consist of home equity loans and other consumer loans.

Commercial and industrial loans are underwritten after evaluating historical and projected profitability and cash flow to determine the borrower's ability to repay their obligation as agreed. Commercial and industrial loans are made primarily based on the identified cash flow of the borrower and secondarily on the underlying collateral supporting the loan facility. Accordingly, the repayment of a commercial and industrial loan depends primarily on the creditworthiness of the borrower (and any guarantors), while liquidation of collateral is a secondary and often insufficient source of repayment.

Commercial real estate and owner occupied real estate loans are subject to the underwriting standards and processes similar to commercial and industrial loans, in addition to those underwriting standards for real estate loans. These loans are viewed primarily as cash flow dependent and secondarily as loans secured by real estate. Repayment of these loans is generally dependent upon the successful operation of the property securing the loan or the principal business conducted on the property securing the loan. In addition, the underwriting considers the amount of the principal advanced relative to the property value. Commercial real estate and owner occupied real estate loans may be adversely affected by conditions in the real estate markets or the economy in general. Management monitors and evaluates commercial real estate and owner occupied real estate loans based on cash flow estimates, collateral and risk-rating criteria. The Company also utilizes third-party experts to provide environmental and market valuations. Substantial effort is required to underwrite, monitor and evaluate commercial real estate and owner occupied real estate loans.

Construction and land development loans are underwritten based upon a financial analysis of the developers and property owners and construction cost estimates, in addition to independent appraisal valuations. These loans will rely on the value associated with the project upon completion. These cost and valuation amounts used are estimates and may be inaccurate. Construction loans generally involve the disbursement of substantial funds over a short period of time with repayment substantially dependent upon the success of the completed project. Sources of repayment of these loans would be permanent financing upon completion or sales of developed property. These loans are closely monitored by onsite inspections and are considered to be of a higher risk than other real estate loans due to their ultimate repayment being sensitive to general economic conditions, availability of long-term financing, interest rate sensitivity, and governmental regulation of real property.

Consumer and other loans consist of home equity loans and lines of credit and other loans to individuals originated through the Company's retail network, which are typically secured by personal property or unsecured. Home equity loans and lines of credit often carry additional risk as a result of typically being in a second position or lower in the event collateral is liquidated. Consumer loans have may also have greater credit risk because of the difference in the underlying collateral, if any. The application of various federal and state bankruptcy and insolvency laws may limit the amount that can be recovered on such loans.

Residential mortgage loans are secured by one to four family dwelling units. This group consists of first mortgages and are originated primarily at loan to value ratios of 80% or less.

Loans that management has the intent and ability to hold for the foreseeable future or until maturity or payoff are stated at the amount of unpaid principal, reduced by unearned income and an allowance for loan losses. Interest on loans is calculated based upon the principal amounts outstanding. The Company defers and amortizes certain origination and commitment fees, and certain direct loan origination costs over the contractual life of the related loan. This results in an adjustment of the related loans yield.

The Company accounts for amortization of premiums and accretion of discounts related to loans purchased based upon the effective interest method. If a loan prepays in full before the contractual maturity date, any unamortized premiums, discounts or fees are recognized immediately as an adjustment to interest income.

Loans are generally classified as non-accrual if they are past due as to maturity or payment of principal or interest for a period of more than 90 days, unless such loans are well-secured and in the process of collection. Loans that are on a current payment status or past due less than 90 days may also be classified as non-accrual if repayment in full of principal and/or interest is in doubt. Loans may be returned to accrual status when all principal and interest amounts contractually due are reasonably assured of repayment within an acceptable period of time, and there is a sustained period of repayment performance of interest and principal by the borrower, in accordance with the contractual terms. Generally, in the case of non-accrual loans, cash received is applied to reduce the principal outstanding.

Allowance for Credit Losses

The allowance for credit losses consists of the allowance for loan losses and the reserve for unfunded lending commitments. The allowance for loan losses represents management's estimate of losses inherent in the loan portfolio as of the balance sheet date and is recorded as a reduction to loans. The reserve for unfunded lending commitments would represent management's estimate of losses inherent in its unfunded loan commitments and would be recorded in other liabilities on the consolidated balance sheet, if necessary. The allowance for credit losses is established through a provision for loan losses charged to operations. Loans are charged against the allowance when management believes that the collectability of the loan principal is unlikely. Recoveries on loans previously charged off are credited to the allowance.

The allowance for credit losses is an amount that represents management's estimate of known and inherent losses related to the loan portfolio and unfunded loan commitments. Because the allowance for credit losses is dependent, to a great extent, on the general economy and other conditions that may be beyond Republic's control, the estimate of the allowance for credit losses could differ materially in the near term.

The allowance consists of specific, general and unallocated components. The specific component relates to loans that are categorized as impaired. For such loans that are classified as impaired, an allowance is established when the discounted cash flows (or collateral value or observable market price) of the impaired loan is lower than the carrying value of that loan. The general component covers non-classified loans and is based on historical loss experience adjusted for several qualitative factors. An unallocated component is maintained to cover uncertainties that could affect management's estimate of probable losses. The unallocated component of the allowance reflects the margin of imprecision inherent in the underlying assumptions used in the methodologies for estimating specific and general losses in the portfolio. All identified losses are immediately charged off and therefore no portion of the allowance for loan losses is restricted to any individual loan or group of loans, and the entire allowance is available to absorb any and all loan losses.

In estimating the allowance for credit losses, management considers current economic conditions, past loss experience, diversification of the loan portfolio, delinquency statistics, results of internal loan reviews and regulatory examinations, borrowers' perceived financial and managerial strengths, the adequacy of underlying collateral, if collateral dependent, or present value of future cash flows, and other relevant and qualitative risk factors. These qualitative risk factors include:

1) Lending policies and procedures, including underwriting standards and collection, charge-off and recovery practices.
2) National, regional and local economic and business conditions as well as the condition of various segments.
3) Nature and volume of the portfolio and terms of loans.
4) Experience, ability and depth of lending management and staff.
5) Volume and severity of past due, classified and nonaccrual loans as well as other loan modifications.
6) Quality of the Company's loan review system, and the degree of oversight by the Company's Board of Directors.
7) Existence and effect of any concentration of credit and changes in the level of such concentrations.

8) Effect of external factors, such as competition and legal and regulatory requirements.

Each factor is assigned a value to reflect improving, stable or declining conditions based on management's best judgment using relevant information available at the time of the evaluation. Adjustments to the factors are supported through documentation of changes in conditions in a narrative accompanying the allowance for loan loss calculation.

A loan is considered impaired when, based on current information and events, it is probable that the Company will be unable to collect the scheduled payments of principal or interest when due according to the contractual terms of the loan agreement. Factors considered by management in determining impairment, include payment status and the probability of collecting scheduled principal and interest payments when due. Loans that experience insignificant payment delays and payment shortfalls generally are not classified as impaired. Management determines the significance of payment delays and payment shortfalls on a case-by-case basis, taking into consideration all the circumstances surrounding the loan and the borrower, including the length of the delay, the reasons for the delay, and the borrower's prior payment record. Impairment is measured on a loan-by-loan basis for commercial and construction loans by the present value of expected future cash flows discounted at the loan's effective interest rate, the loan's obtainable market price, or the fair value of the collateral if the loan is collateral dependent.

An allowance for loan losses is established for an impaired loan if its carrying value exceeds its estimated fair value. The estimated fair values of substantially all of the Company's impaired loans are measured based on the estimated fair value of the loan's collateral.

For commercial, consumer, and residential loans secured by real estate, estimated fair values are determined primarily through third-party appraisals. When a real estate secured loan becomes impaired, a decision is made regarding whether an updated certified appraisal of the real estate is necessary. This decision is based on various considerations, including the age of the most recent appraisal, the loan-to-value ratio based on the original appraisal and the condition of the property. Appraised values are discounted to arrive at the estimated selling price of the collateral, which is considered to be the estimated fair value. The discounts also include estimated costs to sell the property.

For commercial and industrial loans secured by non-real estate collateral, such as accounts receivable, inventory and equipment, estimated fair values are determined based on the borrower's financial statements, inventory reports, accounts receivable agings or equipment appraisals or invoices. Indications of value from these sources are generally discounted based on the age of the financial information or the quality of the assets.

Loans whose terms are modified are classified as troubled debt restructurings if the Company grants such borrowers concessions and it is deemed that those borrowers are experiencing financial difficulty. Concessions granted under a troubled debt restructuring generally involve a temporary reduction in interest rate or an extension of a loan's stated maturity date. Non-accrual troubled debt restructurings are restored to accrual status if principal and interest payments, under the modified terms, are current for six consecutive months after modification. Loans classified as troubled debt restructurings are designated as impaired.

The allowance calculation methodology includes further segregation of loan classes into risk rating categories. The borrower's overall financial condition, repayment sources, guarantors and value of collateral, if appropriate, are evaluated annually for commercial loans or when credit deficiencies arise, such as delinquent loan payments, for commercial and consumer loans. Credit quality risk ratings include regulatory classifications of special mention, substandard, doubtful and loss. Loans classified special mention have potential weaknesses that deserve management's close attention. If uncorrected, the potential weaknesses may result in deterioration of the repayment prospects. Loans classified substandard have a well-defined weakness or weaknesses that jeopardize the liquidation of the debt. They include loans that are inadequately protected by the current sound net worth and paying capacity of the obligor or of the collateral pledged, if any. Loans classified doubtful have all the weaknesses inherent in loans classified substandard with the added characteristic that collection or liquidation in full, on the basis of current conditions and facts, is highly improbable. Loans classified as a loss are considered uncollectible and are charged to the allowance for loan losses. Loans not classified as special mention, substandard, doubtful, or loss are rated pass.

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

Transfers of Financial Assets

The Company accounts for the transfers and servicing financial assets in accordance with ASC 860*, Accounting for Transfers and Servicing of Financial Assets and Extinguishment of Liabilities*. ASC 860*,* revises the standards for accounting for the securitizations and other transfers of financial assets and collateral.

Transfers of financial assets are accounted for as sales, when control over the assets has been surrendered. Control over transferred assets is deemed to be surrendered when (1) the assets have been isolated from the Company, (2) the transferee obtains the right (free of conditions that constrain it from taking advantage of that right) to pledge or exchange the transferred assets, and (3) the Company does not maintain effective control over the transferred assets through an agreement to repurchase them before their maturity.

A servicing asset related to SBA loans is initially recorded when these loans are sold and the servicing rights are retained. The servicing asset is recorded on the balance sheet and included in other assets. An updated fair value of the servicing asset is obtained from an independent third party on a quarterly basis and any necessary adjustments are included in loan and servicing fees on the statement of income. The valuation begins with the projection of future cash flows for each asset based on their unique characteristics, our market-based assumptions for prepayment speeds and estimated losses and recoveries. The present value of the future cash flows are then calculated utilizing our market-based discount ratio assumptions. In all cases, the Company models expected payments for every loan for each quarterly period in order to create the most detailed cash flow stream possible.

The Company uses various assumptions and estimates in determining the impairment of the SBA servicing asset. These assumptions include prepayment speeds and discount rates commensurate with the risks involved and comparable to assumptions used by participants to value and bid serving rights available for sale in the market.

For more information on the SBA servicing asset including the sensitivity of the current fair value of the SBA loan servicing rights to adverse changes in key assumptions, see Note 15 – Fair Value Measurements and Fair Values of Financial Instruments.

Other Loans Held for Sale

Other loans held for sale consist of the guaranteed portion of SBA loans that the Company intends to sell after origination and are reflected at the lower of aggregate cost or fair value. When the sale of the loan occurs, the premium received is combined with the estimated present value of future cash flows on the related servicing asset and recorded as a Gain on the Sale of SBA loans which is categorized as non-interest income. Subsequent fees collected for servicing of the sold portion of a loan are combined with fair value adjustments to the SBA servicing asset and recorded as a net amount in Loan and Servicing Fees, which is also categorized as non-interest income.

Guarantees

The Company accounts for guarantees in accordance with ASC 815 *Guarantor's Accounting and Disclosure Requirements for Guarantees, including Indirect Guarantees of Indebtedness of Others*. ASC 815 requires a guarantor entity, at the inception of a guarantee covered by the measurement provisions of the interpretation, to record a liability for the fair value of the obligation undertaken in issuing the guarantee. The Company has financial and performance letters of credit. Financial letters of credit require the Company to make payment if the customer's financial condition deteriorates, as defined in the agreements. Performance letters of credit require the Company to make payments if the customer fails to perform certain non-financial contractual obligations. The maximum potential undiscounted amount of future payments of these letters of credit as of December 31, 2019 is $17.2 million and they expire as follows: $16.3 million in 2020 and $932,000 in 2021. Amounts due under these letters of credit would be reduced by any proceeds that the Company would be able to obtain in liquidating the collateral for the loans, which varies depending on the customer. There was no liability for guarantees under standby letters of credit as of December 31, 2019 and December 31, 2018.

Premises and Equipment

Premises and equipment (including land) are stated at cost less accumulated depreciation and amortization. Depreciation of furniture and equipment is calculated over the estimated useful life of the asset using the straight-line method for financial reporting purposes, and accelerated methods for income tax purposes. The estimated useful lives are 40 years for buildings and 3 to 13 years for furniture, fixtures and equipment. Leasehold improvements are amortized over the shorter of their estimated useful lives or terms of their respective leases, which range from 1 to 30 years. Repairs and maintenance are charged to current operations as incurred, and renewals and major improvements are capitalized.

Operating Leases

The Company enters into lease agreements to obtain the right to use assets for its business operations, substantially all of which are real estate. Lease liabilities and ROU assets are recognized when the Company enters into operating leases and represent its obligations and rights to use these assets over the period of the leases and may be re-measured for certain modifications, resolution of certain contingencies involving variable consideration, or its exercise of options (renewal, extension, or termination) under the lease.

Operating lease liabilities include fixed and in-substance fixed payments for the contractual duration of the lease, adjusted for renewals or terminations which were considered probable of exercise when measured. During 2019, one lease term for real property was extended, for which the extension was considered probable at the time of measurement. The lease payments are discounted using a rate determined when the lease is recognized. As the Company typically does not know the discount rate implicit in the lease, the Company estimates a discount rate that it believes approximates a collateralized borrowing rate for the estimated duration of the lease. The discount rate is updated when re-measurement events occur.

The related operating lease ROU assets may differ from operating lease liabilities due to initial direct costs, deferred or prepaid lease payments and lease incentives.

The amortization of operating lease ROU assets and the accretion of operating lease liabilities are reported together as fixed lease expense and are included in net occupancy expense within noninterest expense. The fixed lease expense is recognized on a straight-line basis over the life of the lease.

The Company has elected to exclude leases with original terms of less than one year from the operating lease ROU assets and lease liabilities. The Company has no agreements that qualified as a short-term lease. The related short-term lease expense would be included in net occupancy expense.

Other Real Estate Owned

Other real estate owned consists of assets acquired through, or in lieu of, loan foreclosure. They are held for sale and are initially recorded at fair value less cost to sell at the date of foreclosure, establishing a new cost basis. Subsequent to foreclosure, valuations are periodically performed by management and the assets are carried at the lower of carrying amount or fair value, less the cost to sell. Revenue and expenses from operations and changes in the valuation allowance are included in net expenses from other real estate owned.

Advertising Costs

It is the Company's policy to expense advertising costs in the period in which they are incurred.

Income Taxes

Income tax accounting guidance results in two components of income tax expense: current and deferred. Current income tax expense reflects taxes to be paid or refunded for the current period by applying the provisions of the enacted tax law to the taxable income or excess of deductions over revenues. The Company determines deferred income taxes using the liability (or balance sheet) method. Under this method, the net deferred tax asset or liability is based on the tax effects of the differences between the book and tax bases of assets and liabilities and enacted changes in tax rates and laws are recognized in the period in which they occur.

Deferred income tax expense results from changes in deferred tax assets and liabilities between periods. Deferred tax assets are reduced by a valuation allowance if, based on the weight of the evidence available, it is more likely than not that some portion or all of a deferred tax asset will not be realized.

The Company accounts for uncertain tax positions if it is more likely than not, based on the technical merits, that the tax position will be realized or sustained upon examination. The term more likely than not means a likelihood of more than 50 percent. The terms examined and upon examination also include resolution of the related appeals or litigation processes, if any. A tax position that meets the more-likely-than-not recognition threshold is initially and subsequently measured as the largest amount of tax benefit that has a greater than 50 percent likelihood of being realized upon settlement with a taxing authority that has full knowledge of all relevant information. The determination of whether or not a tax position has met the more-likely-than-not recognition threshold considers the facts, circumstances, and information available at the reporting date and is subject to management's judgment.

The Company recognizes interest and penalties on income taxes, if any, as a component of the provision for income taxes.

Stock Based Compensation

The Company has a Stock Option and Restricted Stock Plan ("the 2005 Plan"), under which the Company granted options, restricted stock or stock appreciation rights to the Company's employees, directors, and certain consultants. The 2005 Plan became effective on November 14, 1995, and was amended and approved at the Company's 2005 annual meeting of shareholders. Under the terms of the 2005 Plan, 1.5 million shares of common stock, plus an annual increase equal to the number of shares needed to restore the maximum number of shares that could be available for grant under the 2005 Plan to 1.5 million shares, were available for such grants. As of December 31, 2019, the only grants under the 2005 Plan were option grants. The 2005 Plan provided that the exercise price of each option granted equaled the market price of the Company's stock on the date of the grant. Options granted pursuant to the 2005 Plan vest within one to four years and have a maximum term of 10 years. The 2005 Plan terminated on November 14, 2015 in accordance with the terms and conditions specified in the Plan agreement.

On April 29, 2014 the Company's shareholders approved the 2014 Republic First Bancorp, Inc. Equity Incentive Plan (the "2014 Plan"), under which the Company may grant options, restricted stock, stock units, or stock appreciation rights to the Company's employees, directors, independent contractors, and consultants. Under the terms of the 2014 Plan, 2.6 million shares of common stock, plus an annual adjustment to be no less than 10% of the outstanding shares or such lower number as the Board of Directors may determine, are available for such grants. At December 31, 2019, the maximum number of common shares issuable under the 2014 Plan was 6.4 million shares. Compensation cost for all option awards is calculated and recognized over the vesting period of the option awards. If the service conditions are not met, the Company reverses previously recorded compensation expense upon forfeiture. The Company's accounting policy election is to recognize forfeitures as they occur.

Earnings Per Share

Earnings per share ("EPS") consists of two separate components: basic EPS and diluted EPS. Basic EPS is computed by dividing net income by the weighted average number of common shares outstanding for each period presented. Diluted EPS is calculated by dividing net income by the weighted average number of common shares outstanding plus dilutive common stock equivalents ("CSEs"). CSEs consist of dilutive stock options granted through the Company's stock option plans for the twelve months ended December 31, 2019 and 2018. CSEs previously consisted of dilutive stock options granted through the Company's stock option plans and convertible securities related to the trust preferred securities issued in 2008 for the twelve months ended December 31, 2017. The convertible securities related to trust preferred securities issued in 2008 fully converted to common stock in 2018. There was no interest expense in 2018 related to the trust preferred securities issuance. In the diluted EPS computation, the after tax interest expense on the trust preferred securities issuance would normally be added back to the net income for the twelve months ended December 31, 2017. However, the effect of CSEs (convertible securities related to the trust preferred securities only) and the related add back of after tax interest expense was considered anti-dilutive and therefore was not included in the EPS calculations. The effects of stock options are excluded from the computation of diluted earnings per share in periods in which the effect would be anti-dilutive.

The calculation of EPS for the years ended December 31, 2019, 2018, and 2017 is as follows:

(dollars in thousands, except per share amounts)	2019	2018	2017
Net income (loss) - basic and diluted	$ (3,500)	$ 8,627	$ 8,905
Weighted average shares outstanding	58,833	58,358	56,933
Net income (loss) per share – basic	$ (0.06)	$ 0.15	$ 0.16
Weighted average shares outstanding (including dilutive CSEs)	58,833	59,407	58,250
Net income (loss) per share – diluted	$ (0.06)	$ 0.15	$ 0.15

The following is a summary of securities that could potentially dilute basic earnings per common share in future periods that were not included in the computation of diluted earnings per common share because to do so would have been anti-dilutive for the periods presented.

(in thousands)	2019	2018	2017
Anti-dilutive securities			
Share based compensation awards	4,979	2,813	1,689
Convertible securities	-	-	1,625
Total anti-dilutive securities	4,979	2,813	3,314

Comprehensive Income

The Company presents as a component of comprehensive income the amounts from transactions and other events, which currently are excluded from the consolidated statements of income and are recorded directly to shareholders' equity. These amounts consist of unrealized holding gains (losses) on available for sale securities and amortization of unrealized holding losses on available-for-sale securities transferred to held-to-maturity.

Trust Preferred Securities

The Company has sponsored two outstanding issues of corporation-obligated mandatorily redeemable capital securities of a subsidiary trust holding solely junior subordinated debentures of the corporation, more commonly known as trust preferred securities. The subsidiary trusts are not consolidated with the Company for financial reporting purposes. The purpose of the issuances of these securities was to increase capital. The trust preferred securities qualify as Tier 1 capital for regulatory purposes in amounts up to 25% of total Tier 1 capital. See Note 8 "Borrowings" for further information regarding the issuances.

Variable Interest Entities

The Company follows the guidance under ASC 810, *Consolidation*, with regard to variable interest entities. ASC 810 clarifies the application of consolidation principles for certain legal entities in which voting rights are not effective in identifying the investor with the controlling financial interest. An entity is subject to consolidation under ASC 810 if the investors do not have sufficient equity at risk for the entity to finance its activities without additional subordinated financial support, are unable to direct the entity's activities, or are not exposed to the entity's losses or entitled to its residual returns ("variable interest entities"). Variable interest entities within the scope of ASC 810 will be required to be consolidated by their primary beneficiary. The primary beneficiary of a variable interest entity is determined to be the party that absorbs a majority of the entity's expected losses, receives a majority of its expected returns, or both.

The Company does not consolidate its subsidiary trusts. ASC 810 precludes consideration of the call option embedded in the preferred securities when determining if the Company has the right to a majority of the trusts' expected residual returns. The non-consolidation results in the investment in the common securities of the trusts to be included in other assets with a corresponding increase in outstanding debt of $341,000. In addition, the income received on the Company's investment in the common securities of the trusts is included in other income.

Treasury Stock

Common stock purchased for treasury is recorded at cost.

Recent Accounting Pronouncements

ASU 2016-02

In February 2016, the FASB issued ASU No. 2016-02, *Leases.* From the Company's perspective, the new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases are classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement for lessees. From the landlord perspective, the new standard requires a lessor to classify leases as either sales-type, finance or operating. A lease is treated as a sale if it transfers all of the risks and rewards, as well as control of the underlying asset, to the lessee. If risks and rewards are conveyed without the transfer of control, the lease is treated as a financing. If the lessor doesn't convey risks and rewards or control, an operating lease results. The new standard was effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years.

In July 2018, the FASB issued ASU 2018-11 "Leases (Topic 842): Targeted Improvements," which provided lessees the option to apply the new leasing standard to all open leases as of the adoption date. Prior to this ASU issuance, a modified retrospective transition approach was required.

In December 2018, the FASB issued ASU 2018-20 "Leases (Topic 842): Narrow-Scope Improvements for Lessors," which provided lessors a policy election to not evaluate whether certain sales taxes and other similar taxes are lessor costs or lessee costs. Additionally, the update requires certain lessors to exclude from variable payments lessor costs paid by lessees directly to third parties.

The Company adopted this ASU on January 1, 2019. The Company recognized an ROU asset of $34.2 million and total operating lease liability obligations of $35.1 million at January 1, 2019. Capital ratios remained in compliance with the regulatory definition of well capitalized. There were no material changes to the recognition of operating lease expense in the consolidated statements of income. The Company adopted certain practical expedients available under the new guidance, which did not require it to (1) reassess whether any expired or existing contracts contain leases, (2) reassess the lease classification for any expired or existing leases, (3) reassess initial direct costs for any existing leases, and (4) evaluate whether certain sales taxes and other similar taxes are lessor costs. The Company elected the use-of-hindsight practical expedient. Additionally, the Company elected to apply the new lease guidance at the adoption date, rather than at the beginning of the earliest period presented.

ASU 2016-13

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments.* The ASU requires an organization to measure all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. Financial institutions and other organizations will now use forward-looking information to better inform their credit loss estimates. Many of the loss estimation techniques applied today will still be permitted, although the inputs to those techniques will change to reflect the full amount of expected credit losses. Additionally, the ASU amends the accounting for credit losses on available-for-sale debt securities and purchased financial assets with credit deterioration. The Company is currently evaluating the impact of this ASU, continuing its implementation efforts and reviewing the loss modeling requirements consistent with lifetime expected loss estimates. Calculations of expected losses under the new guidance were run parallel to the calculations under existing guidance to assess and evaluate the potential impact to the Company's financial statements. The new model includes different assumptions used in calculating credit losses, such as estimating losses over the estimated life of a financial asset and considers expected future changes in macroeconomic conditions. The adoption of this ASU may result in an increase to the Company's allowance for loan losses which will depend upon the nature and characteristics of the Company's loan portfolio at the adoption date, as well as the macroeconomic conditions and forecasts at that date. The Company expects an initial increase to the allowance for credit losses, in the range of 0% to 11% of the December 31, 2019 allowance for credit losses, or an incremental increase to the allowance for credit losses in the range of $0 up to approximately $1.0 million. When finalized, this one-time increase as a result of the adoption of ASU 2016-13 will be recorded, net of tax, as an adjustment to retained earnings effective January 1, 2020. This estimate is subject to change based on continuing refinement and validation of the model and methodologies. For the Company, this update became effective January 1, 2020.

ASU 2017-08

In March 2017, the FASB issued ASU 2017-08, *Premium Amortization on Purchased Callable Debt Securities,* which amends the amortization period for certain purchased callable debt securities held at a premium, shortening such period to the earliest call date. The ASU was effective for public business entities for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. For all other entities, the ASU is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Earlier application is permitted for all entities, including adoption in an interim period. If an entity early adopts the ASU in an interim period, any adjustments must be reflected as of the beginning of the fiscal year that includes that interim period. The adoption of ASU 2017-08 did not have a material impact on the consolidated financial statements.

ASU 2018-07

In June 2018, the FASB issued ASU 2018-07, *Compensation – Stock Compensation (Topic 718).* The ASU simplifies the accounting for share based payments granted to non-employees for goods and services. The ASU applies to all share based payment transactions in which a grantor acquires goods or services from non-employees to be used or consumed in a grantor's own operations by issuing share based payment awards. With the amended guidance from ASU 2018-07, non-employees share based payments are measured with an estimate of the fair value of the equity of the business is obligated to issue at the grant date (the date that the business and the stock award recipient agree to the terms of the award). Compensation would be recognized in the same period and in the same manner as if the entity had paid cash for goods and services instead of stock. The ASU is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018, with early adoption permitted. The Company adopted this ASU on January 1, 2019. The adoption of this ASU did not have a significant impact on the Company's financial condition, results of operations, and consolidated financial statements.

3. Investment Securities

A summary of the amortized cost and market value of securities available for sale and securities held to maturity at December 31, 2019 and 2018 is as follows:

	At December 31, 2019			
(dollars in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
U.S. Government agencies	$ 38,743	$ 1	$ (439)	$ 38,305
Collateralized mortgage obligations	329,492	2,368	(422)	331,438
Agency mortgage-backed securities	98,953	82	(98)	98,937
Municipal securities	4,064	18	-	4,082
Corporate bonds	69,499	79	(3,298)	66,280
Total securities available for sale	$ 540,751	$ 2,548	$ (4,257)	$ 539,042
U.S. Government agencies	$ 94,913	$ 482	$ (294)	$ 95,101
Collateralized mortgage obligations	416,177	7,603	(793)	422,987
Agency mortgage-backed securities	133,752	1,782	(513)	135,021
Total securities held to maturity	$ 644,842	$ 9,867	$ (1,600)	$ 653,109

	At December 31, 2018			
(dollars in thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Collateralized mortgage obligations	$ 197,812	$ 567	$ (2,120)	$ 196,259
Agency mortgage-backed securities	39,105	5	(611)	38,499
Municipal securities	20,807	64	(232)	20,639
Corporate bonds	62,583	87	(3,396)	59,274
Asset-backed securities	6,433	-	(90)	6,343
Total securities available for sale	$ 326,740	$ 723	$ (6,449)	$ 321,014
U.S. Government agencies	$ 107,390	$ -	$ (3,772)	$ 103,618
Collateralized mortgage obligations	500,690	570	(5,793)	495,467
Agency mortgage-backed securities	153,483	-	(5,245)	148,238
Total securities held to maturity	$ 761,563	$ 570	$ (14,810)	$ 747,323

The following table presents investment securities by stated maturity at December 31, 2019. Collateralized mortgage obligations and agency mortgage-backed securities have expected maturities that differ from contractual maturities because borrowers have the right to call or prepay and, therefore, these securities are classified separately with no specific maturity date.

	Available for Sale		Held to Maturity	
(dollars in thousands)	Amortized Cost	Fair Value	Amortized Cost	Fair Value
Due in 1 year or less	$ 3,790	$ 3,795	$ -	$ -
After 1 year to 5 years	39,653	39,435	20,048	20,073
After 5 years to 10 years	65,863	62,617	74,865	75,028
After 10 years	3,000	2,820	-	-
Collateralized mortgage obligations	329,492	331,438	416,177	422,987
Agency mortgage-backed securities	98,953	98,937	133,752	135,021
Total	$ 540,751	$ 539,042	$ 644,842	$ 653,109

Expected maturities will differ from contractual maturities because borrowers have the right to call or prepay obligations with or without prepayment penalties.

The Company's investment securities portfolio consists primarily of debt securities issued by U.S. government agencies, U.S. government-sponsored agencies, state governments, local municipalities and certain corporate entities. There were no private label mortgage-backed securities ("MBS") or collateralized mortgage obligations ("CMO") held in the investment securities portfolio as of December 31, 2019 and December 31, 2018. There were also no MBS or CMO securities that were rated "Alt-A" or "sub-prime" as of those dates.

The fair value of investment securities is impacted by interest rates, credit spreads, market volatility and liquidity conditions. Net unrealized gains and losses in the available for sale portfolio are included in shareholders' equity as a component of accumulated other comprehensive income or loss, net of tax. Securities classified as held to maturity are carried at amortized cost. An unrealized loss exists when the current fair value of an individual security is less than the amortized cost basis.

The Company regularly evaluates investment securities that are in an unrealized loss position in order to determine if the decline in fair value is other than temporary. Factors considered in the evaluation include the current economic climate, the length of time and the extent to which the fair value has been below cost, the current interest rate environment and the rating of each security. An OTTI loss must be recognized for a debt security in an unrealized loss position if the Company intends to sell the security or it is more likely than not that it will be required to sell the security prior to recovery of the amortized cost basis. The amount of OTTI loss recognized is equal to the difference between the fair value and the amortized cost basis of the security that is attributed to credit deterioration. Accounting standards require the evaluation of the expected cash flows to be received to determine if a credit loss has occurred. In the event of a credit loss, that amount must be recognized against income in the current period. The portion of the unrealized loss related to other factors, such as liquidity conditions in the market or the current interest rate environment, is recorded in accumulated other comprehensive income (loss) for investment securities classified available for sale. There were no impairment charges (credit losses) recorded during the years ended December 31, 2019, 2018, and 2017.

At December 31, 2019 and 2018, investment securities in the amount of approximately $847.1 million and $710.7 million, respectively, were pledged as collateral for public deposits and certain other deposits as required by law.

The following table presents a roll-forward of the balance of credit-related impairment losses on securities held at December 31, 2019, 2018, and 2017 for which a portion of OTTI was recognized in other comprehensive income:

(dollars in thousands)	2019	2018	2017
Beginning Balance, January 1st	$ -	$ 274	$ 937
Reductions for securities sold during the period	-	(274)	(663)
Ending Balance, December 31st	$ -	$ -	$ 274

The following tables show the fair value and gross unrealized losses associated with the investment portfolio, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position as of December 31, 2019 and 2018:

At December 31, 2019	Less than 12 months		12 months or more		Total	
(dollars in thousands)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Government agencies	$ 28,136	$ 439	$ -	$ -	$ 28,136	$ 439
Collateralized mortgage obligations	63,384	328	6,164	94	69,548	422
Agency mortgage-backed securities	2,924	13	6,411	85	9,335	98
Municipal securities	-	-	-	-	-	-
Corporate bonds	2,820	180	51,882	3,118	54,702	3,298
Total Available for Sale	$ 97,264	$ 960	$ 64,457	$ 3,297	$ 161,721	$ 4,257

At December 31, 2019	Less than 12 months		12 months or more		Total	
(dollars in thousands)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Government agencies	$ 33,092	$ 220	$ 3,703	$ 74	$ 36,795	$ 294
Collateralized mortgage obligations	24,211	18	64,324	775	88,535	793
Agency mortgage-backed securities	14,044	33	52,132	480	66,176	513
Total Held to Maturity	$ 71,347	$ 271	$ 120,159	$ 1,329	$ 191,506	$ 1,600

At December 31, 2018	Less than 12 months		12 months or more		Total	
(dollars in thousands)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
Collateralized mortgage obligations	$ 58,883	$ 270	$ 83,377	$ 1,850	$ 142,260	$ 2,120
Agency mortgage-backed securities	1,134	10	16,768	601	17,902	611
Municipal securities	1,549	7	12,154	225	13,703	232
Corporate bonds	-	-	53,189	3,396	53,189	3,396
Asset backed securities	6,343	90	-	-	6,343	90
Total Available for Sale	$ 67,909	$ 377	$ 165,488	$ 6,072	$ 233,397	$ 6,449

At December 31, 2018	Less than 12 months		12 months or more		Total	
(dollars in thousands)	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Government agencies	$ 5,351	$ 26	$ 98,267	$ 3,746	$ 103,618	$ 3,772
Collateralized mortgage obligations	44,574	475	173,467	5,318	218,041	5,793
Agency mortgage-backed securities	-	-	119,243	5,245	119,243	5,245
Total Held to Maturity	$ 49,925	$ 501	$ 390,977	$ 14,309	$ 440,902	$ 14,810

Unrealized losses on securities in the investment portfolio amounted to $5.9 million with a total fair value of $353.2 million as of December 31, 2019 compared to unrealized losses of $21.3 million with a total fair value of $674.3 million as of December 31, 2018. The Company believes the unrealized losses presented in the tables above are temporary in nature and primarily related to market interest rates or limited trading activity in particular type of security rather than the underlying credit quality of the issuers. The Company does not believe that these losses are other than temporary and does not currently intend to sell or believe it will be required to sell securities in an unrealized loss position prior to maturity or recovery of the amortized cost bases.

The Company held nine U.S. Government agency securities, thirty-two collateralized mortgage obligations and seventeen agency mortgage-backed securities that were in an unrealized loss position at December 31, 2019. Principal and interest payments of the underlying collateral for each of these securities carry minimal credit risk. Management found no evidence of OTTI on any of these securities and believes the unrealized losses are due to fluctuations in fair values resulting from changes in market interest rates and are considered temporary as of December 31, 2019.

All municipal securities held in the investment portfolio are reviewed on least a quarterly basis for impairment. Each bond carries an investment grade rating by either Moody's or Standard & Poor's. In addition, the Company periodically conducts its own independent review on each issuer to ensure the financial stability of the municipal entity. The largest geographic concentration was in Pennsylvania and New Jersey and consisted of either general obligation or revenue bonds backed by the taxing power of the issuing municipality. At December 31, 2019, the investment portfolio had no municipal securities that were in an unrealized loss position.

At December 31, 2019, the investment portfolio included seven corporate bonds that were in an unrealized loss position. Management believes the unrealized losses on these securities were also driven by changes in market interest rates and not a result of credit deterioration. The seven corporate bonds are with four of the largest U.S. financial institutions. Each financial institution is well capitalized.

At December 31, 2018, the investment portfolio included one asset-backed security that was in an unrealized loss position. The asset-backed security held in the investment securities portfolio was a Sallie Mae bond, collateralized by student loans which are guaranteed by the U.S. Department of Education. This security was sold during the first quarter of 2019.

Proceeds associated with the sale of securities available for sale in 2019 were $54.7 million. Gross gains of $1.2 million and gross losses of $67,000 were realized on these sales. The tax provision applicable to the net gains of $1.1 million for the year ended December 31, 2019 amounted to $280,000.

Proceeds associated with the sale of securities available for sale in 2018 were $6.4 million. Gross losses of $67,000 were realized on these sales. The tax benefit applicable to the net losses for the year ended December 31, 2018 amounted to $18,000. Included in the 2018 sales activity was the sale of one CDO security. Proceeds from the sale of the CDO security totaled $660,000. A gross loss of $66,000 was realized on this sale. The tax benefit applicable to the net loss for the twelve months ended December 31, 2018 amounted to $17,000. Management had previously stated that it did not intend to sell the CDO security prior to its maturity or the recovery of its cost basis, nor would it be forced to sell this security prior to maturity or recovery of the cost basis. This statement was made over a period of several years where there was limited trading activity in the pooled trust preferred CDO market resulting in fair market value estimates well below the book values. During 2018, management received several inquiries regarding the availability of the remaining CDO security and noted an increased level of trading in this type of security. As a result of the increased activity and the level of bids received, management elected to sell the remaining CDO security resulting in a net loss of $66,000 during 2018.

Proceeds of sales of securities available for sale in 2017 were $31.2 million. Gross gains of $652,000 and gross losses of $798,000 were realized on these sales. The tax benefit applicable to the net losses for the year ended December 31, 2017 amounted to $52,000. Included in the 2017 sales activity were the sales of two CDO securities. Proceeds from the sale of the CDO securities totaled $1.5 million. Gross losses of $798,000 were realized on these sales. The tax benefit applicable to the net losses for the twelve months ended December 31, 2017 amounted to $287,000. As a result of the increased activity and the level of bids received, management elected to sell two CDOs resulting in a net loss of $798,000 during 2017 which was offset by gains on sales of agency mortgage-backed securities, collateralized mortgage obligations and corporate bonds.

In December 2018, twenty-three CMOs and two MBSs with a fair value of $230.1 million that were previously classified as available-for-sale were transferred to the held-to-maturity category. The securities were transferred at fair value. Unrealized losses of $9.4 million associated with the transferred securities will remain in other comprehensive income and be amortized as an adjustment to yield over the remaining life of the securities. At December 31, 2019, the total approximated unrealized loss of $8.1 million remaining to be amortized includes ten securities previously transferred in July 2014.

4. Loans Receivable

The following table sets forth the Company's gross loans by major categories as of December 31, 2019 and 2018:

(dollars in thousands)		**December 31, 2019**		**December 31, 2018**
Commercial real estate	$	613,631	$	515,738
Construction and land development		121,395		121,042
Commercial and industrial		223,906		200,423
Owner occupied real estate		424,400		367,895
Consumer and other		101,320		91,152
Residential mortgage		263,444		140,364
Total loans receivable		1,748,096		1,436,614
Deferred costs (fees)		99		(16)
Allowance for loan losses		(9,266)		(8,615)
Net loans receivable	$	1,738,929	$	1,427,983

The Company disaggregates its loan portfolio into groups of loans with similar risk characteristics for purposes of estimating the allowance for loan losses. The Company's loan groups include commercial real estate, construction and land development, commercial and industrial, owner occupied real estate, consumer, and residential mortgages. The loan groups are also considered classes for purposes of monitoring and assessing credit quality based on certain risk characteristics.

Included in loans are loans due from directors and other related parties of $13.6 million at December 31, 2019, $13.0 million at December 31, 2018, and $8.9 million at December 31, 2017. The Board of Directors approves loans to individual directors to conform to our underwriting policies. The following presents the activity in amount due from directors and other related parties for the years ended December 31, 2019, 2018, and 2017.

(dollars in thousands)		**December 31, 2019**		**December 31, 2018**		**December 31, 2017**
Balance at beginning of year	$	13,029	$	8,920	$	7,862
Additions		2,064		4,812		1,896
Repayments		(1,500)		(703)		(838)
Balance at end of year	$	13,593	$	13,029	$	8,920

5. Allowances for Loan Losses

The following tables provide the activity in and ending balances of the allowance for loan losses by loan portfolio class at and for the years ended December 31, 2019, 2018, and 2017:

(dollars in thousands)	Commercial Real Estate	Construction and Land Development	Commercial and Industrial	Owner Occupied Real Estate	Consumer and Other	Residential Mortgage	Unallocated	Total
Year ended December, 2019								
Allowance for loan losses:								
Beginning balance:	**$ 2,462**	**$ 777**	**$ 1,754**	**$ 2,033**	**$ 577**	**$ 894**	**$ 118**	**$ 8,615**
Charge-offs	-	-	(1,356)	-	(126)	-	-	(1,482)
Recoveries	-	-	217	2	9	-	-	228
Provisions	581	(89)	316	257	130	811	(101)	1,905
Ending balance	$ 3,043	$ 688	$ 931	$ 2,292	$ 590	$ 1,705	$ 17	$ 9,266
Year ended December, 2018								
Allowance for loan losses:								
Beginning Balance:	**$ 3,774**	**$ 725**	**$ 1,317**	**$ 1,737**	**$ 573**	**$ 392**	**$ 81**	**$ 8,599**
Charge-offs	(1,603)	-	(151)	(465)	(219)	-	-	(2,438)
Recoveries	50	-	81	20	3	-	-	154
Provisions (credits)	241	52	507	741	220	502	37	2,300
Ending balance	$ 2,462	$ 777	$ 1,754	$ 2,033	$ 577	$ 894	$ 118	$ 8,615
Year ended December, 2017								
Allowance for loan losses:								
Beginning Balance:	**$ 3,254**	**$ 557**	**$ 2,884**	**$ 1,382**	**$ 588**	**$ 58**	**$ 432**	**$ 9,155**
Charge-offs	-	-	(1,366)	(157)	(53)	-	-	(1,576)
Recoveries	54	-	64	-	2	-	-	120
Provisions (credits)	466	168	(265)	512	36	334	(351)	900
Ending balance	$ 3,774	$ 725	$ 1,317	$ 1,737	$ 573	$ 392	$ 81	$ 8,599

The following tables provide a summary of the allowance for loan losses and balance of loans receivable by loan class and by impairment method as of December 31, 2019 and 2018:

(dollars in thousands)	**Commercial Real Estate**	**Construction and Land Development**	**Commercial and Industrial**	**Owner Occupied Real Estate**	**Consumer and Other**	**Residential Mortgage**	**Unallocated**	**Total**
December 31, 2019								
Allowance for loan losses:								
Individually evaluated for impairment	$ 265	$ -	$ 23	$ 268	$ -	$ -	$ -	$ 556
Collectively evaluated for impairment	2,778	688	908	2,024	590	1,705	17	8,710
Total allowance for loan losses	$ 3,043	$ 688	$ 931	$ 2,292	$ 590	$ 1,705	$ 17	$ 9,266
Loans receivable:								
Loans evaluated	$ 10,331	$ -	$ 3,087	$ 3,634	$ 1,062	$ 768	$ -	$ 18,882
Loans evaluated collectively	603,300	121,395	220,819	420,766	100,258	262,676	-	1,729,214
Total loans receivable	$ 613,631	$ 121,395	$ 223,906	$ 424,400	$ 101,320	$ 263,444	$ -	$ 1,748,096

(dollars in thousands)	**Commercial Real Estate**	**Construction and Land Development**	**Commercial and Industrial**	**Owner Occupied Real Estate**	**Consumer and Other**	**Residential Mortgage**	**Unallocated**	**Total**
December 31, 2018								
Allowance for loan losses:								
Individually evaluated for impairment	$ 295	$ -	$ 867	$ 217	$ 94	$ -	$ -	$ 1,473
Collectively evaluated for impairment	2,167	777	887	1,816	483	894	118	7,142
Total allowance for loan losses	$ 2,462	$ 777	$ 1,754	$ 2,033	$ 577	$ 894	$ 118	$ 8,615
Loans receivable:								
Loans evaluated	$ 10,947	$ -	$ 3,662	$ 2,560	$ 861	$ -	$ -	$ 18,030
Loans evaluated collectively	504,791	121,042	196,761	365,335	90,291	140,364	-	1,418,584
Total loans receivable	$ 515,738	$ 121,042	$ 200,423	$ 367,895	$ 91,152	$ 140,364	$ -	$ 1,436,614

A loan is considered impaired, when based on current information and events, it is probable that the Company will be unable to collect all amounts due from the borrower in accordance with the contractual terms of the loan. Impaired loans include nonperforming loans, but also include internally classified accruing loans. The following table summarizes information with regard to impaired loans by loan portfolio class as of December 31, 2019 and 2018:

	December 31, 2019			December 31, 2018		
(dollars in thousands)	Recorded Investment	Unpaid Principal Balance	Related Allowance	Recorded Investment	Unpaid Principal Balance	Related Allowance
With no related allowance recorded:						
Commercial real estate	$ 6,186	$ 6,192	$ -	$ 6,332	$ 6,337	$ -
Construction and land development	-	-	-	-	-	-
Commercial and industrial	2,719	2,989	-	1,655	5,418	-
Owner occupied real estate	2,127	2,275	-	1,905	2,013	-
Consumer and other	1,062	1,375	-	710	1,082	-
Residential mortgage	768	768	-	-	-	-
Total	$ 12,862	$ 13,599	$ -	$ 10,602	$ 14,850	$ -
With an allowance recorded:						
Commercial real estate	$ 4,145	$ 4,667	$ 265	$ 4,615	$ 5,498	$ 295
Construction and land development	-	-	-	-	-	-
Commercial and industrial	368	383	23	2,007	2,195	867
Owner occupied real estate	1,507	1,521	268	655	704	217
Consumer and other	-	-	-	151	158	94
Residential mortgage	-	-	-	-	-	-
Total	$ 6,020	$ 6,571	$ 556	$ 7,428	$ 8,555	$ 1,473
Total:						
Commercial real estate	$ 10,331	$ 10,859	$ 265	$ 10,947	$ 11,835	$ 295
Construction and land development	-	-	-	-	-	-
Commercial and industrial	3,087	3,372	23	3,662	7,613	867
Owner occupied real estate	3,634	3,796	268	2,560	2,717	217
Consumer and other	1,062	1,375	-	861	1,240	94
Residential mortgage	768	768	-	-	-	-
Total	$ 18,882	$ 20,170	$ 556	$ 18,030	$ 23,405	$ 1,473

The following table presents additional information regarding the Company's impaired loans for the years ended December 31, 2019, 2018, and 2017:

	Years Ended December 31,											
	2019				2018				2017			
(dollars in thousands)		Average Recorded Investment		Interest Income Recognized		Average Recorded Investment		Interest Income Recognized		Average Recorded Investment		Interest Income Recognized
With no related allowance recorded:												
Commercial real estate	$	6,463	$	289	$	10,429	$	288	$	9,579	$	366
Construction and land development		-		-		-		-		-		-
Commercial and industrial		2,144		5		3,341		52		2,270		37
Owner occupied real estate		1,908		38		2,275		58		1,894		58
Consumer and other		909		20		658		21		801		21
Residential mortgage		461		2		-		-		26		1
Total	$	11,885	$	354	$	16,703	$	419	$	14,570	$	483
With an allowance recorded:												
Commercial real estate	$	4,281	$	1	$	3,076	$	-	$	6,490	$	14
Construction and land development		-		-		-		-		-		-
Commercial and industrial		838		-		1,862		6		2,517		68
Owner occupied real estate		1,071		31		969		25		1,390		32
Consumer and other		30		-		191		1		420		10
Residential mortgage		-		-		-		-		-		-
Total	$	6,220	$	32	$	6,098	$	32	$	10,817	$	124
Total:												
Commercial real estate	$	10,744	$	290	$	13,505	$	288	$	16,069	$	380
Construction and land development		-		-		-		-		-		-
Commercial and industrial		2,982		5		5,203		58		4,787		105
Owner occupied real estate		2,979		69		3,244		83		3,284		90
Consumer and other		939		20		849		22		1,221		31
Residential mortgage		461		2		-		-		26		1
Total	$	18,105	$	386	$	22,801	$	451	$	25,387	$	607

The total average recorded investment on the Company's impaired loans for the years ended December 31, 2019, 2018, and 2017 were $18.1 million, $22.8 million, and $25.4 million, respectively, and the related interest income recognized for those dates was $386,000, $451,000, and $607,000, respectively.

The performance and credit quality of the loan portfolio is also monitored by analyzing the age of the loans receivable as determined by the length of time a recorded payment is past due. The following table presents the classes of the loan portfolio summarized by the past due status as of December 31, 2019 and 2018:

(dollars in thousands)	30-59 Days Past Due	60-89 Days Past Due	Greater than 90 Days	Total Past Due	Current	Total Loans Receivable	Loans Receivable > 90 Days and Accruing
At December 31, 2019							
Commercial real estate	$ -	$ 313	$ 4,159	$ 4,472	$ 609,159	$ 613,631	$ -
Construction and land development	-	-	-	-	121,395	121,395	-
Commercial and industrial	-	50	3,087	3,137	220,769	223,906	-
Owner occupied real estate	-	1,219	3,337	4,556	419,844	424,400	-
Consumer and other	112	241	1,062	1,415	99,905	101,320	-
Residential mortgage	-	-	768	768	262,676	263,444	-
Total	$ 112	$ 1,823	$ 12,413	$ 14,348	$ 1,733,748	$ 1,748,096	$ -

(dollars in thousands)	30-59 Days Past Due	60-89 Days Past Due	Greater than 90 Days	Total Past Due	Current	Total Loans Receivable	Loans Receivable > 90 Days and Accruing
At December 31, 2018							
Commercial real estate	$ 339	$ 921	$ 4,631	$ 5,891	$ 509,847	$ 515,738	$ -
Construction and land development	-	-	-	-	121,042	121,042	-
Commercial and industrial	280	-	3,661	3,941	196,482	200,423	-
Owner occupied real estate	-	653	1,188	1,841	366,054	367,895	-
Consumer and other	214	-	861	1,075	90,077	91,152	-
Residential mortgage	302	-	-	302	140,062	140,364	-
Total	$ 1,135	$ 1,574	$ 10,341	$ 13,050	$ 1,423,564	$ 1,436,614	$ -

The following table presents the classes of the loan portfolio summarized by the aggregate pass rating and the classified ratings of special mention, substandard and doubtful within our internal risk rating system as of December 31, 2019 and 2018:

(dollars in thousands)	Pass	Special Mention	Substandard	Doubtful	Total
At December 31, 2019:					
Commercial real estate	$ 609,382	$ 90	$ 4,159	$ -	$ 613,631
Construction and land development	121,395	-	-	-	121,395
Commercial and industrial	220,819	-	3,087	-	223,906
Owner occupied real estate	418,997	1,770	3,633	-	424,400
Consumer and other	100,258	-	1,062	-	101,320
Residential mortgage	262,555	121	768	-	263,444
Total	$ 1,733,406	$ 1,981	$ 12,709	$ -	$ 1,748,096

(dollars in thousands)	Pass	Special Mention	Substandard	Doubtful	Total
At December 31, 2018:					
Commercial real estate	$ 510,186	$ 921	$ 4,631	$ -	$ 515,738
Construction and land development	121,042	-	-	-	121,042
Commercial and industrial	196,751	10	3,382	280	200,423
Owner occupied real estate	364,032	1,303	2,560	-	367,895
Consumer and other	90,291	-	861	-	91,152
Residential mortgage	140,240	124	-	-	140,364
Total	$ 1,422,542	$ 2,358	$ 11,434	$ 280	$ 1,436,614

The following table shows non-accrual loans by class as of December 31, 2019 and 2018:

(dollars in thousands)	December 31, 2019	December 31, 2018
Commercial real estate	$ 4,159	$ 4,631
Construction and land development	-	-
Commercial and industrial	3,087	3,661
Owner occupied real estate	3,337	1,188
Consumer and other	1,062	861
Residential mortgage	768	-
Total	$ 12,413	$ 10,341

If these loans were performing under their original contractual rate, interest income on such loans would have increased approximately $548,000, $498,000, and $590,000, for 2019, 2018, and 2017, respectively.

Troubled Debt Restructurings

A modification to the contractual terms of a loan which results in a concession to a borrower that is experiencing financial difficulty is classified as a troubled debt restructuring ("TDR"). The concessions made in a TDR are those that would not otherwise be considered for a borrower or collateral with similar risk characteristics. A TDR is typically the result of efforts to minimize potential losses that may be incurred during loan workouts, foreclosure, or repossession of collateral at a time when collateral values are declining. Concessions include a reduction in interest rate below current market rates, a material extension of time to the loan term or amortization period, partial forgiveness of the outstanding principal balance, acceptance of interest only payments for a period of time, or a combination of any of these conditions.

The following table summarizes information with regard to outstanding troubled debt restructurings at December 31, 2019 and 2018:

(dollars in thousands)	Number of Loans	Accrual Status	Non-Accrual Status	Total TDRs
December 31, 2019				
Commercial real estate	1	$ 6,173	$ -	$ 6,173
Construction and land development	-	-	-	-
Commercial and industrial	-	-	-	-
Owner occupied real estate	-	-	-	-
Consumer and other	-	-	-	-
Residential mortgage	-	-	-	-
Total	1	$ 6,173	$ -	$ 6,173
December 31, 2018				
Commercial real estate	1	$ 6,316	$ -	$ 6,316
Construction and land development	-	-	-	-
Commercial and industrial	3	-	1,224	1,224
Owner occupied real estate	1	-	242	242
Consumer and other	-	-	-	-
Residential mortgage	-	-	-	-
Total	5	$ 6,316	$ 1,466	$ 7,782

All TDRs are considered impaired and are therefore individually evaluated for impairment in the calculation of the allowance for loan losses. Some TDRs may not ultimately result in the full collection of principal and interest as restructured and could lead to potential incremental losses. These potential incremental losses would be factored into our estimate of the allowance for loan losses. The level of any subsequent defaults will likely be affected by future economic conditions.

There were no loan modifications made during the twelve months ended December 31, 2019 and 2018 that met the criteria of a TDR.

After a loan is determined to be a TDR, we continue to track its performance under the most recent restructured terms. There were no TDRs that subsequently defaulted during the year ended December 31, 2019. There were three TDRs that subsequently defaulted during the year ended December 31, 2018.

There was one residential mortgage in the process of foreclosure as of December 31, 2019. There were no residential mortgages in the process of foreclosure at December 31, 2018. There was no other real estate owned relating to residential real estate at December 31, 2019 and 2018.

6. Other Real Estate Owned

Other real estate owned consists of properties acquired as a result of foreclosures or deeds in-lieu-of foreclosure. Costs relating to the development or improvement of assets are capitalized, and costs relating to holding the property are charged to expense. As of December 31, 2019 the balance of OREO is comprised of five properties.

The following table presents a reconciliation of other real estate owned for the years ended December 31, 2019, 2018, and 2017:

(dollars in thousands)	**December 31, 2019**	**December 31, 2018**	**December 31, 2017**
Beginning Balance, January 1st	$ 6,223	$ 6,966	$ 10,174
Additions	1,225	315	291
Valuation adjustments	(646)	(563)	(3,000)
Dispositions	(5,072)	(495)	(499)
Ending Balance	$ 1,730	$ 6,223	$ 6,966

7. Premises and Equipment

A summary of premises and equipment is as follows:

(dollars in thousands)	**December 31, 2019**	**December 31, 2018**
Land	$ 18,991	$ 15,957
Buildings	58,917	49,204
Leasehold improvements	29,898	20,396
Furniture, fixtures and equipment	29,067	21,430
Construction in progress	13,728	8,041
	150,601	115,028
Less accumulated depreciation	(33,645)	(27,367)
Net premises and equipment	$ 116,956	$ 87,661

Depreciation expense on premises and equipment amounted to approximately $6.5 million, $5.4 million, and $4.6 million in 2019, 2018, and 2017, respectively. The construction in progress balance of $13.7 million mainly represents costs incurred for the selection and development of future store locations. Of this balance, $5.7 million represents land purchased and land deposits for five future store locations. Contractual construction commitments related to future store locations were $5.3 million as of December 31, 2019.

8. Borrowings

Republic has a line of credit with the Federal Home Loan Bank ("FHLB") of Pittsburgh with a maximum borrowing capacity of $860.5 million as of December 31, 2019. As of December 31, 2019 and 2018, there were no fixed term borrowings against this line of credit. There were no overnight borrowings outstanding as of December 31, 2019. As of December 31, 2018, we had overnight borrowings of $91.4 million at a rate of 2.65% against this line of credit. As of December 31, 2019 and 2018, FHLB had issued letters of credit, on Republic's behalf, totaling $150.0 million and $100.0 million, respectively, against its available credit line, primarily to be used as collateral for public funds deposit balances. There were no fixed term advances outstanding at any month-end during 2019 and 2018. At December 31, 2019, $1.2 billion of loans collateralized the overnight advance and the letter of credit. The maximum amount of overnight borrowings outstanding at any month-end was $69.0 million in 2019 and $206.9 million in 2018.

Republic also has a line of credit in the amount of $10.0 million available for the purchase of federal funds through the Atlantic Community Bankers Bank ("ACBB"). At December 31, 2019 and 2018, Republic had no amount outstanding against the line at ACBB. There were no overnight advances on this line at any month end in 2019 and 2018.

Republic also established a line of credit with Zions Bank in the amount of $15.0 million to assist in managing our liquidity position during the year ended December 31, 2018. At December 31, 2019 and 2018, Republic had no amount outstanding against the line at Zions Bank. There were no overnight balances on this line at any month end in 2019 and 2018.

Subordinated debt and corporation-obligated-mandatorily redeemable capital securities of subsidiary trust holding solely junior obligations of the corporation:

The Company has sponsored two outstanding issues of corporation-obligated mandatorily redeemable capital securities of a subsidiary trust holding solely junior subordinated debentures of the corporation, more commonly known as trust preferred securities. The subsidiary trusts are not consolidated with the Company for financial reporting purposes. The purpose of the issuances of these securities was to increase capital. The trust preferred securities qualify as Tier 1 capital for regulatory purposes in an amount up to 25% of total Tier 1 capital.

In December 2006, Republic Capital Trust II ("Trust II") issued $6.0 million of trust preferred securities to investors and $0.2 million of common securities to the Company. Trust II purchased $6.2 million of junior subordinated debentures of the Company due 2037, and the Company used the proceeds to call the securities of Republic Capital Trust I ("Trust I"). The debentures supporting Trust II have a variable interest rate, adjustable quarterly, at 1.73% over the 3-month Libor. The Company may call the securities on any interest payment date after five years without a prepayment penalty.

On June 28, 2007, the Company caused Republic Capital Trust III ("Trust III"), through a pooled offering, to issue $5.0 million of trust preferred securities to investors and $0.2 million common securities to the Company. Trust III purchased $5.2 million of junior subordinated debentures of the Company due 2037, which have a variable interest rate, adjustable quarterly, at 1.55% over the 3 month Libor. The Company has the ability to call the securities on any interest payment date without a prepayment penalty.

On June 10, 2008, the Company caused Republic First Bancorp Capital Trust IV ("Trust IV") to issue $10.8 million of convertible trust preferred securities as part of the Company's strategic capital plan. The securities were purchased by various investors, including Vernon W. Hill, II, founder and chairman (retired) of Commerce Bancorp and, since December 5, 2016, chairman of the Company. This investor group also included a family trust of Harry D. Madonna, president and chief executive officer of Republic First Bancorp, Inc, and Theodore J. Flocco, Jr., who, since the investment, has been elected to the Company's Board of Directors and serves as the Chairman of the Audit Committee. Trust IV also issued $0.3 million of common securities to the Company. Trust IV purchased $11.1 million of junior subordinated debentures due 2038, which paid interest at an annual rate of 8.0% and were callable after the fifth year under certain terms and conditions. The trust preferred securities of Trust IV were convertible into approximately 1.7 million shares of common stock of the Company, based on a conversion price of $6.50 per share of Company common stock. One independent director converted $240,000 of trust preferred securities into 37,000 shares of common stock in 2017. On January 31, 2018, the Company notified the existing holders of Trust IV of its intent to fully redeem these securities in accordance with the Optional Redemption terms included in the Indenture Agreement. The securities were redeemed on March 31, 2018 at a price equal to the outstanding principal amount. The holders had the option to convert these securities into shares of the Company's common stock at any time until the end of the last business day preceding the redemption date. During the first quarter of 2018, $10.1 million of trust preferred securities were converted into 1.6 million shares of common stock. After redemption of the remaining securities on March 31 2018, Trust IV was dissolved.

Deferred issuance costs included in subordinated debt were $76,000 and $82,000 at December 31, 2019 and December 31, 2018, respectively. Amortization of deferred issuance costs were $6,000, $6,000, and $29,000 for the years ended December 31, 2019, 2018, and 2017, respectively. Deferred issuance costs in the amount of $467,000 were recorded against additional paid in capital during the first quarter of 2018 as a result of the conversion of trust preferred securities into common stock in accordance with ASC 470-20.

9. Deposits

The following is a breakdown, by contractual maturities of the Company's certificates of deposit for the years 2020 through 2024.

(dollars in thousands)	**2020**	**2021**	**2022**	**2023**	**2024**	**Thereafter**	**Total**
Certificates of Deposit	$ 170,562	$ 50,079	$ 1,130	$ 1,071	$ 737	$ -	$ 223,579

Certificates of deposit of $250,000 or more totaled $146.8 million and $104.6 million at December 31, 2019 and 2018, respectively.

Deposits of related parties totaled $103.0 million and $102.7 million at December 31, 2019 and 2018, respectively. Brokered deposits totaled $1.0 million and $18.6 million at December 31, 2019 and 2018 respectively. Overdrafts totaled $540,000 and $277,000 at December 31, 2019 and 2018, respectively.

10. Income Taxes

The provision (benefit) for income taxes for the years ended December 31, 2019, 2018, and 2017 consists of the following:

(dollars in thousands)	2019	2018	2017
Current			
Federal	$ 394	$ -	$ 2,137
State	-	51	-
Deferred			
Federal	(1,524)	2,006	(5,056)
State	(220)	(479)	-
Total provision (benefit) for income taxes	$ (1,350)	$ 1,578	$ (2,919)

The following table reconciles the difference between the actual tax provision and the amount per the statutory federal income tax rate of 21.0% for the year ended December 31, 2019, 21.0% for the year ended December 31, 2018 and 35.0% for the year ended December 31, 2017.

(dollars in thousands)	2019	2018	2017
Tax provision computed at federal statutory rate	$ (1,018)	$ 2,143	$ 2,095
State income tax, net of federal benefit	(260)	(340)	-
Tax exempt interest	(425)	(430)	(573)
Deferred tax only items	-	199	-
Effect of change in tax rate	-	-	7,661
Deferred tax asset valuation allowance adjustment	-	-	(12,214)
Other	353	6	112
Total provision (benefit) for income taxes	$ (1,350)	$ 1,578	$ (2,919)

The significant components of the Company's net deferred tax asset as of December 31, 2019 and 2018 are as follows:

(dollars in thousands)	2019	2018
Deferred tax assets		
Allowance for loan losses	$ 2,351	$ 2,185
Deferred compensation	620	591
Unrealized losses on securities available for sale	2,495	3,935
Foreclosed real estate write-downs	996	2,351
Interest income on non-accrual loans	541	615
Net operating loss carryforward	5,123	3,541
Other	2,263	1,472
Total deferred tax assets	14,389	14,690
Deferred tax liabilities		
Deferred loan costs	1,138	1,103
Premises and equipment	612	634
Other	-	619
Total deferred tax liabilities	1,750	2,356
Net deferred tax asset	$ 12,639	$ 12,334

The Company's net deferred tax asset increased to $12.6 million at December 31, 2019 compared to $12.3 million at December 31, 2018. The Company began recognizing an increased provision for federal and state income taxes during the first quarter of 2018 after reversing our deferred tax asset valuation allowance during the fourth quarter of 2017. The company initially recorded a deferred tax asset valuation allowance in 2011 and continued to carry this allowance after determining that some portion of the deferred tax asset balance may not be realized within its life cycle based on the weight of available evidence. Adjustments to the valuation allowance resulted in the recognition of a minimal provision for income taxes in each period until its reversal in 2017. The effective tax rates for the years ended December 31, 2019 and 2018 were (28%) and 15%, respectively.

The $12.6 million net deferred tax asset as of December 31, 2019 is comprised of $5.1 million currently recognizable through net operating loss carryforwards ("NOLs") and $7.5 million attributable to several items associated with temporary timing differences which will reverse at some point in the future to provide a net reduction in tax liabilities. The Company's largest future reversal relates to its unrealized losses on securities available for sale, which totaled $2.5 million as of December 31, 2019.

The Company evaluates the carrying amount of our deferred tax assets on a quarterly basis or more frequently, if necessary, in accordance with the guidance provided in FASB Accounting Standards Codification Topic 740 (ASC 740), in particular, applying the criteria set forth therein to determine whether it is more likely than not (i.e. a likelihood of more than 50%) that some portion, or all, of the deferred tax asset will not be realized within its life cycle, based on the weight of available evidence. If management makes a determination based on the available evidence that it is more likely than not that some portion or all of the deferred tax assets will not be realized in future periods, a valuation allowance is calculated and recorded. These determinations are inherently subjective and dependent upon estimates and judgments concerning management's evaluation of both positive and negative evidence.

The Company has a federal NOL in the amount of $17.2 million which will begin to expire after December 31, 2031 if not utilized prior to that date. In order to realize our deferred tax assets, we must generate sufficient taxable income in future years prior to expiration. The $6.9 million NOL generated in 2019 will not expire.

In assessing the need for a valuation allowance, the Company carefully weighed both positive and negative evidence currently available. Judgment is required when considering the relative impact of such evidence. The weight given to the potential effect of positive and negative evidence must be commensurate with the extent to which it can be objectively verified.

The Company is in a 3-year cumulative profit position factoring in pre-tax GAAP income and permanent book/tax differences. Growth in interest-earning assets is expected to continue and is supported by the capital raise completed at the end of 2016. The ratio of non-performing assets to total assets along with other credit quality metrics continue to improve. A number of cost control measures have been implemented to offset the challenges faced in growing revenue as a result of compression in the net interest margin. The Company has added 10 store locations in the past 3 years and since the inception of the growth and expansion strategy in 2014 almost every new store location has met or exceeded expectations. The success of the expansion into New York, combined with the stabilization of interest rates and continued loan growth are expected to improve profitability going forward.

Conversely, the Company generated a loss in the current year when factoring in pre-tax GAAP income and permanent book/tax differences. The Bank's net interest margin declined during 2019 as a result of the challenging interest rate environment which appears to be consistent across the financial services industry. Non-accrual loans increased by $2.1 million during 2019 although the ratio of non-performing loans to total loans decreased slightly. Rising interest rates and a downturn in the economy could significantly decrease the volume of mortgage loan originations.

Based on the guidance provided in FASB Accounting Standards Codification Topic 740 (ASC 740), the Company believed that the positive evidence considered at December 31, 2019 outweighed the negative evidence and that it was more likely than not that all of the Company's deferred tax assets would be realized within their life cycle. Therefore, a valuation allowance was not required at December 31, 2019.

The net deferred tax asset balance was $12.6 million as of December 31, 2019, $12.3 million as of December 31, 2018, and $12.7 million as of December 31, 2017. The deferred tax asset will continue to be analyzed on a quarterly basis for changes affecting realizability.

The Company accounts for uncertain tax positions if it is more likely than not, based on the technical merits, that the tax position will be realized or sustained upon examination. The Company has not identified any uncertain tax position as of December 31, 2019. No interest or penalties have been recorded for the years ended December 31, 2019, 2018, and 2017. The Internal Revenue Service has completed its audits of the Company's federal tax returns for all tax years through December 31, 2015. The Pennsylvania Department of Revenue is not currently conducting any income tax audits. The Company's federal income tax returns filed subsequent to 2016 remain subject to examination by the Internal Revenue Service.

11. Financial Instruments with Off-Balance Sheet Risk

The Company is a party to financial instruments with off-balance-sheet risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit and standby letters of credit. These instruments involve to varying degrees, elements of credit and interest rate risk in excess of the amount recognized in the financial statements.

Credit risk is defined as the possibility of sustaining a loss due to the failure of the other parties to a financial instrument to perform in accordance with the terms of the contract. The maximum exposure to credit loss under commitments to extend credit and standby letters of credit is represented by the contractual amount of these instruments. The Company uses the same underwriting standards and policies in making credit commitments as it does for on-balance-sheet instruments.

Financial instruments whose contract amounts represent potential credit risk are commitments to extend credit of approximately $329.9 million and $286.4 million and standby letters of credit of approximately $17.2 million and $13.9 million at December 31, 2019 and 2018, respectively. Commitments often expire without being drawn upon. Of the $329.9 million of commitments to extend credit at December 31, 2019, substantially all were variable rate commitments.

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Commitments generally have fixed expiration dates or other termination clauses and many require the payment of a fee. Since many of the commitments are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. The Company evaluates each customer's creditworthiness on a case-by-case basis. The amount of collateral obtained upon extension of credit is based on management's credit evaluation of the customer. Collateral held varies but may include real estate, marketable securities, pledged deposits, equipment and accounts receivable.

Standby letters of credit are conditional commitments issued that guarantee the performance of a customer to a third party. The credit risk and collateral policy involved in issuing letters of credit is essentially the same as that involved in extending loan commitments. The amount of collateral obtained is based on management's credit evaluation of the customer. Collateral held varies but may include real estate, marketable securities, pledged deposits, equipment and accounts receivable. Management believes that the proceeds obtained through a liquidation of such collateral would be sufficient to cover the maximum potential amount of future payments required under the corresponding guarantees. The current amount of liability as of December 31, 2019 and 2018 for guarantees under standby letters of credit issued is not material.

12. Commitments and Contingencies

The Company and Republic are from time to time a party (plaintiff or defendant) to lawsuits that are in the normal course of business. While any litigation involves an element of uncertainty, management is of the opinion that the liability of the Company and Republic, if any, resulting from such actions will not have a material effect on the financial condition or results of operations of the Company and Republic.

13. Regulatory Capital

Dividend payments by Republic to the Company are subject to the Pennsylvania Banking Code of 1965 (the "Banking Code") and the Federal Deposit Insurance Act (the "FDIA"). Under the Banking Code, no dividends may be paid except from "accumulated net earnings" (generally, undivided profits). Under the FDIA, an insured bank may pay no dividends if the bank is in arrears in the payment of any insurance assessment due to the FDIC. Under current banking laws, Republic would be limited to $48.2 million of dividends plus an additional amount equal to its net profit for 2020, up to the date of any such dividend declaration. However, dividends would be further limited in order to maintain capital ratios.

State and Federal regulatory authorities have adopted standards for the maintenance of adequate levels of capital by Republic. Federal banking agencies impose four minimum capital requirements on the Company's risk-based capital ratios based on total capital, Tier 1 capital, CET 1 capital, and a leverage capital ratio. The risk-based capital ratios measure the adequacy of a bank's capital against the riskiness of its assets and off-balance sheet activities. Failure to maintain adequate capital is a basis for "prompt corrective action" or other regulatory enforcement action. In assessing a bank's capital adequacy, regulators also consider other factors such as interest rate risk exposure; liquidity, funding and market risks; quality and level or earnings; concentrations of credit; quality of loans and investments; risks of any nontraditional activities; effectiveness of bank policies; and management's overall ability to monitor and control risks.

The following table presents the Company's and Republic's capital regulatory ratios calculated based on Basel III guidelines at December 31, 2019 and 2018:

(dollars in thousands)	Actual		Minimum Capital Adequacy		Minimum Capital Adequacy with Capital Buffer		To Be Well Capitalized Under Prompt Corrective Action Provisions	
	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
At December 31, 2019:								
Total risk based capital								
Republic	$ 252,307	11.94%	$ 169,016	8.00%	$ 221,833	10.50%	$ 211,270	10.00%
Company	261,759	12.37%	169,251	8.00%	222,141	10.50%	-	-%
Tier one risk based								
Republic	243,041	11.50%	126,762	6.00%	179,579	8.50%	169,016	8.00%
Company	252,493	11.93%	126,938	6.00%	179,829	8.50%	-	-%
CET 1 risk based								
Republic	243,041	11.50%	95,071	4.50%	147,889	7.00%	137,325	6.50%
Company	241,493	11.41%	95,203	4.50%	148,094	7.00%	-	-%
Tier one leveraged								
Republic	245,158	7.54%	128,935	4.00%	128,935	4.00%	161,169	5.00%
Company	249,168	7.83%	129,058	4.00%	129,058	4.00%	-	-%
At December 31, 2018:								
Total risk based capital								
Republic	$ 231,610	13.26%	$ 139,722	8.00%	$ 172,489	9.875%	$ 174,652	10.00%
Company	262,964	15.03%	140,009	8.00%	172,824	9.875%	-	-%
Tier one risk based								
Republic	222,995	12.77%	104,791	6.00%	137,539	7.875%	139,722	8.00%
Company	254,349	14.53%	105,007	6.00%	137,821	7.875%	-	-%
CET 1 risk based								
Republic	222,995	12.77%	78,594	4.50%	111,341	6.375%	113,524	6.50%
Company	243,349	13.90%	78,755	4.50%	111,570	6.375%	-	-%
Tier one leveraged								
Republic	222,995	8.21%	108,685	4.00%	108,685	4.00%	135,857	5.00%
Company	254,349	9.35%	108,800	4.00%	108,800	4.00%	-	-%

Management believes that Republic met, as of December 31, 2019, all capital adequacy requirements to which it is subject. As of December 31, 2019 and 2018, the FDIC categorized Republic as well capitalized under the regulatory framework for prompt corrective action provisions of the Federal Deposit Insurance Act. There are no calculations or events since that notification that management believes have changed Republic's category.

Under the capital rules, risk-based capital ratios are calculated by dividing common equity Tier 1, Tier 1, and total risk-based capital, respectively, by risk-weighted assets. Assets and off-balance sheet credit equivalents are assigned to one of several categories of risk-weights, based primarily on relative risk. Under applicable capital rules, Republic is required to maintain a minimum common equity Tier 1 capital ratio requirement of 4.5%, a minimum Tier 1 capital ratio requirement of 6%, a minimum total capital requirement of 8% and a minimum leverage ratio requirement of 4%. Under the rules, in order to avoid limitations on capital distributions (including dividend payments and certain discretionary bonus payments to executive officers), a banking organization must hold a capital conservation buffer comprised of common equity Tier 1 capital above its minimum risk-based capital requirements in an amount greater than 2.5% of total risk-weighted assets. The capital conservation buffer, which is composed of common equity Tier 1 capital, began on January 1, 2016 at the 0.625% level and was phased in over a three year period (increasing by that amount on each January 1, until it reached 2.5% on January 1, 2019). Implementation of the deductions and other adjustments to common equity Tier 1 capital began on January 1, 2015 and were phased-in over a three-year period.

The following table shows the required capital ratios with the conversation buffer over the phase-in period.

	Basel III Community Banks Minimum Capital Ratio Requirements			
	2016	2017	2018	2019
Common equity tier 1 capital (CET1)	5.125%	5.750%	6.375%	7.000%
Tier 1 capital (to risk weighted assets)	6.625%	7.250%	7.875%	8.500%
Total capital (to risk-weighted assets)	8.625%	9.250%	9.875%	10.500%

The Company believes that, as of December 31, 2019, all capital adequacy requirements are met under the Basel III Capital Rules on a fully phased-in basis.

14. Benefit Plans

Defined Contribution Plan

The Company has a defined contribution plan pursuant to the provision of 401(k) of the Internal Revenue Code. The Plan covers all full-time employees who meet age and service requirements. The plan provides for elective employee contributions with a matching contribution from the Company limited to 4% of total salary. The total expense charged to Republic, and included in salaries and employee benefits relating to the plan, was $1.2 million in 2019, $1.1 million in 2018, and $927,000 in 2017.

Directors' and Officers' Plans

The Company has agreements that provide for an annuity payment upon the retirement or death of certain directors and officers, ranging from $15,000 to $25,000 per year for ten years. The agreements were modified for most participants in 2001, to establish a minimum age of 65 to qualify for the payments. All participants are fully vested. The accrued benefits under the plan amounted to $1.1 million at both December 31, 2019 and December 31, 2018, which is included in other liabilities. The expense for the years ended December 31, 2019, 2018, and 2017, totaled $16,000, $18,000, and $24,000, respectively, which is included in salaries and employee benefits. The Company funded the plan through the purchase of certain life insurance contracts. The aggregate cash surrender value of these contracts (owned by the Company) was $2.6 million at December 31, 2019 and $2.5 million at December 31, 2018 and is included in other assets.

The Company maintains a deferred compensation plan for the benefit of certain officers and directors. The plan permitted certain participants to make elective contributions to their accounts, subject to applicable provisions of the Internal Revenue Code. In addition, the Company made discretionary contributions to participant accounts. Company contributions were subject to vesting, and generally vested three years after the end of the plan year to which the contribution applied, subject to acceleration of vesting upon certain changes in control (as defined in the plan) and to forfeiture upon termination for cause (as defined in the plan). No future contributions are permitted. Participant accounts are adjusted to reflect distributions, and income, gains, losses, and expenses as if the accounts had been invested in permitted investments selected by the participants, including Company common stock. The plan provides for distributions upon retirement and, subject to applicable limitations under the Internal Revenue Code, limited hardship withdrawals. As of December 31, 2019 and 2018, $1.3 million and $1.2 million in benefits, respectively, had vested and the accrued benefits are included in other liabilities. Expense recognized for the deferred compensation plan for 2019 and 2017 was $2,000 and $28,000, respectively, and is included in salaries and employee benefits. A reduction in expense of $15,000 was recognized for the deferred compensation plan during 2018. Although the plan is an unfunded plan, and does not require the Company to segregate any assets, the Company has purchased shares of Company common stock in anticipation of its obligation to pay benefits under the plan. Such shares are classified in the financial statements as stock held by deferred compensation plan. No purchases were made in 2019, 2018, and 2017. As of December 31, 2019, approximately 25,437 shares of Company common stock were classified as stock held by deferred compensation plan.

15. Fair Value Measurements and Fair Values of Financial Instruments

Management uses its best judgment in estimating the fair value of the Company's financial instruments; however, there are inherent weaknesses in any estimation technique. Therefore, for substantially all financial instruments, the fair value estimates herein are not necessarily indicative of the amounts the Company could have realized in a sales transaction on the dates indicated. The estimated fair value amounts have been measured as of their respective year-ends and have not been re-evaluated or updated for purposes of these financial statements subsequent to those respective dates. As such, the estimated fair values of these financial instruments subsequent to the respective reporting dates may be different than the amounts reported at each year-end.

The Company follows the guidance issued under ASC 820, *Fair Value Measurement,* which defines fair value, establishes a framework for measuring fair value under GAAP, and identifies required disclosures on fair value measurements.

ASC 820 establishes a fair value hierarchy that prioritizes the inputs to valuation methods used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements). The three levels of the fair value hierarchy under ASC 820 are as follows:

Level 1: Unadjusted quoted prices in active markets that are accessible at the measurement date for identical, unrestricted assets or liabilities.

Level 2: Quoted prices in markets that are not active, or inputs that are observable either directly or indirectly, for substantially the full term of the asset or liability.

Level 3: Prices or valuation techniques that require inputs that are both significant to the fair value measurement and unobservable (i.e. supported with little or no market activity).

An asset or liability's level within the fair value hierarchy is based on the lowest level of input that is significant to the fair value measurement.

For financial assets measured at fair value on a recurring basis, the fair value measurements by level within the fair value hierarchy used at December 31, 2019 and December 31, 2018 were as follows:

(dollars in thousands)	Total	(Level 1) Quoted Prices in Active Markets for Identical Assets	(Level 2) Significant Other Observable Inputs	(Level 3) Significant Unobservable Inputs
December 31, 2019				
Assets:				
U.S. Government agencies	$ 38,305	$ -	$ 38,305	$ -
Collateralized mortgage obligations	331,438	-	331,438	-
Agency mortgage-backed securities	98,937	-	98,937	-
Municipal securities	4,082	-	4,082	-
Corporate bonds	66,280	-	63,460	2,820
Securities Available for Sale	$ 539,042	$ -	$ 536,222	$ 2,820
Mortgage Loans Held for Sale	$ 10,345	$ -	$ 10,345	$ -
SBA Servicing Assets	4,447	-	-	4,447
Interest Rate Lock Commitments	362	-	362	-
Best Efforts Forward Loan Sales Commitments	4	-	4	-
Mandatory Forward Loan Sales Commitments	2	-	2	-
Liabilities:				
Interest Rate Lock Commitments	-	-	-	-
Best Efforts Forward Loan Sales Commitments	133	-	133	-
Mandatory Forward Loan Sales Commitments	83	-	83	-
December 31, 2018				
Assets:				
Collateralized mortgage obligations	$ 196,259	$ -	$ 196,259	$ -
Agency mortgage-backed securities	38,499	-	38,499	-
Municipal securities	20,639	-	20,639	-
Corporate bonds	59,274	-	56,205	3,069
Asset-backed securities	6,343	-	6,343	-
Securities Available for Sale	$ 321,014	$ -	$ 317,945	$ 3,069
Mortgage Loans Held for Sale	$ 20,887	$ -	$ 20,887	$ -
SBA Servicing Assets	4,785	-	-	4,785
Interest Rate Lock Commitments	410	-	410	-
Best Efforts Forward Loan Sales Commitments	5	-	5	-
Mandatory Forward Loan Sales Commitments	10	-	10	-
Liabilities:				
Interest Rate Lock Commitments	-	-	-	-
Best Efforts Forward Loan Sales Commitments	138	-	138	-
Mandatory Forward Loan Sales Commitments	230	-	230	-

The following table presents an analysis of the activity in the SBA servicing assets for the years ended December 31, 2019, 2018, and 2017:

(dollars in thousands)	2019	2018	2017
Beginning balance, January 1st	$ 4,785	$ 5,243	$ 5,352
Additions	1,026	1,000	1,078
Fair value adjustments	(1,364)	(1,458)	(1,187)
Ending balance, December 31st	$ 4,447	$ 4,785	$ 5,243

Fair value adjustments are recorded as loan and servicing fees on the statement of operations. Servicing fee income, not including fair value adjustments, totaled $1.9 million, $2.0 million, and $1.8 million for the years ended December 31, 2019, 2018, and 2017, respectively. Total loans in the amount of $201.7 million at December 31, 2019 and $204.4 million at December 31, 2018 were serviced for others.

The following table presents a reconciliation of the securities available for sale measured at fair value on a recurring basis using significant unobservable inputs (Level 3) for the years ended December 31, 2019, 2018, and 2017:

	Year Ended December 31, 2019		**Year Ended December 31, 2018**		**Year Ended December 31, 2017**	
Level 3 Investments Only *(dollars in thousands)*	**Trust Preferred Securities**	**Corporate Bonds**	**Trust Preferred Securities**	**Corporate Bonds**	**Trust Preferred Securities**	**Corporate Bonds**
Balance, January 1,	$ -	$ 3,069	$ 489	$ 3,086	$ 1,820	$ 2,971
Security transferred to Level 3 measurement	-	-	-	-	-	-
Unrealized (losses) gains	-	(249)	237	(17)	1,006	115
Paydowns	-	-	-	-	-	-
Proceeds from sales	-	-	(660)	-	(1,539)	-
Realized losses	-	-	(66)	-	(798)	-
Impairment charges on Level 3	-	-	-	-	-	-
Balance, December 31,	$ -	$ 2,820	$ -	$ 3,069	$ 489	$ 3,086

For assets measured at fair value on a nonrecurring basis, the fair value measurements by level within the fair value hierarchy used at December 31, 2019 and 2018, respectively, were as follows:

(dollars in thousands)	**Total**	**(Level 1) Quoted Prices in Active Markets for Identical Assets**	**(Level 2) Significant Other Observable Inputs**	**(Level 3) Significant Unobservable Inputs**
December 31, 2019:				
Impaired loans	$ 5,730	$ -	$ -	$ 5,730
Other real estate owned	899	-	-	899
December 31, 2018:				
Impaired loans	$ 5,955	$ -	$ -	$ 5,955
Other real estate owned	1,114	-	-	1,114

The table below presents additional quantitative information about Level 3 assets measured at fair value (dollars in thousands):

	Quantitative Information about Level 3 Fair Value Measurements			
Asset Description	**Fair Value**	**Valuation Technique**	**Unobservable Input**	**Range (Weighted Average)**
December 31, 2019				
Corporate bonds	$ 2,820	Discounted Cash Flows	Discount Rate	(6.66%)
SBA servicing assets	$ 4,447	Discounted Cash Flows	Conditional Prepayment Rate	(13.53%)
			Discount Rate	(10.75%)
Impaired loans	$ 5,730	Appraised Value of Collateral (1)	Liquidation expenses (2)	9% - 20% (12%) (3)
Other real estate owned	$ 899	Appraised Value of Collateral (1)	Liquidation expenses (2)	6% - 16% (8%) (3)
December 31, 2018				
Corporate bonds	$ 3,069	Discounted Cash Flows	Discount Rate	(8.24%)
SBA servicing assets	$ 4,785	Discounted Cash Flows	Conditional Prepayment Rate	(10.31%)
			Discount Rate	(11.50%)
Impaired loans	$ 5,955	Appraised Value of Collateral (1)	Liquidation expenses (2)	11% - 24% (13%) (3)
Other real estate owned	$ 1,114	Appraised Value of Collateral (1)	Liquidation expenses (2)	(7%) (3)

(1) Fair value is generally determined through independent appraisals of the underlying collateral, which include Level 3 inputs that are not identifiable.
(2) Appraisals may be adjusted by management for qualitative factors such as economic conditions and estimated liquidation expenses.
(3) The range and weighted average of qualitative factors such as economic conditions and estimated liquidation expenses are presented as a percent of the appraised value.

The significant unobservable inputs for impaired loans and other real estate owned are the appraised value or an agreed upon sales price. These values are adjusted for estimated costs to sell which are incremental direct costs to transact a sale such as broker commissions, legal fees, closing costs and title transfer fees. The costs must be considered essential to the sale and would not have been incurred if the decision to sell had not been made. The costs to sell are based on costs associated with the Company's actual sales of other real estate owned which are assessed annually.

Fair Value Assumptions

The following information should not be interpreted as an estimate of the fair value of the entire Company since a fair value calculation is only provided for a limited portion of the Company's assets and liabilities. Due to a wide range of valuation techniques and the degree of subjectivity used in making the estimates, comparisons between the Company's disclosures and those of other companies may not be meaningful. The following methods and assumptions were used to estimate the fair values of the Company's financial instruments at December 31, 2019 and December 31, 2018:

Investment Securities

The fair value of securities available for sale (carried at fair value) and held to maturity (carried at amortized cost) are determined by obtaining quoted market prices on nationally recognized securities exchanges (Level 1), or matrix pricing (Level 2), which is a mathematical technique used widely in the industry to value debt securities without relying exclusively on quoted market prices for the specific securities but rather by relying on the securities' relationship to other benchmark quoted prices. For certain securities, which are not traded in active markets or are subject to transfer restrictions, valuations are adjusted to reflect illiquidity and/or non-transferability, and such adjustments are generally based on available market evidence (Level 3). In the absence of such evidence, management's best estimate is used. Management's best estimate consists of both internal and external support on certain Level 3 investments. Internal cash flow models using a present value formula that includes assumptions market participants would use along with indicative exit pricing obtained from broker/dealers (where available) were used to support fair values of certain Level 3 investments.

The types of instruments valued based on matrix pricing in active markets include all of the Company's U.S. government and agency securities, corporate bonds, asset backed securities, and municipal obligations held in the investment securities portfolio. Such instruments are generally classified within Level 2 of the fair value hierarchy. As required by ASC 820-10, the Company does not adjust the matrix pricing for such instruments.

Level 3 is for positions that are not traded in active markets or are subject to transfer restrictions, and may be adjusted to reflect illiquidity and/or non-transferability, with such adjustment generally based on available market evidence. In the absence of such evidence, management's best estimate is used. Subsequent to inception, management only changes Level 3 inputs and assumptions when corroborated by evidence such as transactions in similar instruments, completed or pending third-party transactions in the underlying investment or comparable entities, subsequent rounds of financing, recapitalizations and other transactions across the capital structure, offerings in the equity or debt markets, and changes in financial ratios or cash flows. Republic has one Level 3 investment classified as available for sale which is a single corporate bond.

The corporate bond included in Level 3 was transferred from Level 2 in 2010 and is not actively traded. Impairment would depend on the repayment ability of the underlying issuer, which is assessed through a detailed quarterly review of the issuer's financial statements. The issuer is a "well capitalized" financial institution as defined by federal banking regulations and has demonstrated the ability to raise additional capital, when necessary, through the public capital markets. The fair value of this corporate bond is estimated by obtaining a price of a comparable floating rate debt instrument through Bloomberg.

Mortgage Loans Held for Sale (Carried at Fair Value)

The fair value of mortgage loans held for sale is determined by obtaining prices at which they could be sold in the principal market at the measurement date and are classified within Level 2 of the fair value hierarchy. Republic elected to adopt the fair value option for its mortgage loans held for sale portfolio in order to more accurately reflect their economic value. Interest income on loans held for sale, totaled $500,000 and $1.2 million for the twelve months ended December 31, 2019 and December 31, 2018, respectively, are included in interest and fees in the statements of operations.

The following table reflects the difference between the carrying amount of mortgage loans held for sale, measured at fair value and the aggregate unpaid principal amount that Republic is contractually entitled to receive at maturity as of December 31, 2019 and December 31, 2018 (dollars in thousands):

	Carrying Amount	Aggregate Unpaid Principal Balance	Excess Carrying Amount Over Aggregate Unpaid Principal Balance
December 31, 2019	$ 10,345	$ 9,983	$ 362
December 31, 2018	$ 20,887	$ 20,071	$ 816

Changes in the excess carrying amount over aggregate unpaid principal balance are recorded in the statement of operations in mortgage banking income. Republic did not have any mortgage loans held for sale recorded at fair value that were 90 or more days past due and on non-accrual at December 31, 2019 and December 31, 2018.

Interest Rate Lock Commitments ("IRLC")

The Company determines the value of IRLCs by comparing the market price to the price locked in with the customer, adding fees or points to be collected at closing, subtracting commissions to be paid at closing, and subtracting estimated remaining loan origination costs to the bank based on the processing status of the loan. The Company also considers pull-through as it determines the fair value of IRLCs. Factors that affect pull-through rates include the origination channel, current mortgage interest rates in the market versus the interest rate incorporated in the IRLC, the purpose of the mortgage (purchase versus financing), the stage of completion of the underlying application and underwriting process, and the time remaining until the IRLC expires. IRLCs are classified within Level 2 of the valuation hierarchy.

Best Efforts Forward Loan Sales Commitments

Best efforts forward loan sales commitments are classified within Level 2 of the valuation hierarchy. Best efforts forward loan sales commitments fix the forward sales price that will be realized upon the sale of mortgage loans into the secondary market. Best efforts forward loan sales commitments are entered into for loans at the time the borrower commitment is made. These best efforts forward loan sales commitments are valued using the committed price to the counterparty against the current market price of the interest rate lock commitment or mortgage loan held for sale.

Mandatory Forward Loan Sales Commitments

Fair values for mandatory forward loan sales commitments are based on fair values of the underlying mortgage loans and the probability of such commitments being exercised. Due to the observable inputs used by Republic, best efforts mandatory loan sales commitments are classified within Level 2 of the valuation hierarchy.

Impaired Loans (Carried at Lower of Cost or Fair Value)

Impaired loans are those that the Company has measured impairment based on the fair value of the loan's collateral. Fair value is generally determined based upon independent third party appraisals of the properties, or discounted cash flows based upon the expected proceeds. These assets are included as Level 3 fair values, based upon the lowest level of input that is significant to the fair value measurements. The fair value consists of the loan balances less any valuation allowance. The valuation allowance amount is calculated as the difference between the recorded investment in a loan and the present value of expected future cash flows or it is calculated based on discounted collateral values if the loans are collateral dependent.

Other Real Estate Owned (Carried at Lower of Cost or Fair Value)

These assets are carried at the lower of cost or fair value. Fair value is determined through valuations periodically performed by third-party appraisers, and the real estate is carried at the lower of its carrying amount or fair value less estimated costs to sell. Any declines in the fair value of the real estate properties below the initial cost basis are recorded through a valuation expense. At December 31, 2019 and December 31, 2018, these assets are carried at current fair value and classified within Level 3 of the fair value hierarchy.

SBA Servicing Asset (Carried at Fair Value)

The SBA servicing asset is initially recorded when loans are sold and the servicing rights are retained and recorded on the balance sheet. An updated fair value is obtained from an independent third party on a quarterly basis and adjustments are presented as loan and servicing fees on the statement of income. The valuation begins with the projection of future cash flows for each asset based on their unique characteristics, the Company's market-based assumptions for prepayment speeds and estimated losses and recoveries. The present value of the future cash flows are then calculated utilizing the Company's market-based discount ratio assumptions. In all cases, the Company models expected payments for every loan for each quarterly period in order to create the most detailed cash flow stream possible.

The Company uses assumptions and estimates in determining the impairment of the SBA servicing asset. These assumptions include prepayment speeds and discount rates commensurate with the risks involved and comparable to assumptions used by participants to value and bid serving rights available for sale in the market. At December 31, 2019 and December 31, 2018, the sensitivity of the current fair value of the SBA loan servicing rights to immediate 10% and 20% adverse changes in key assumptions are included in the accompanying table.

(dollars in thousands)	December 31, 2019		December 31, 2018	
SBA Servicing Asset				
Fair Value of SBA Servicing Asset	$	4,447	$	4,785
Composition of SBA Loans Serviced for Others				
Fixed-rate SBA loans		2%		2%
Adjustable-rate SBA loans		98%		98%
Total		100%		100%
Weighted Average Remaining Term		20.7 years		20.4 years
Prepayment Speed		13.53%		10.31%
Effect on fair value of a 10% increase	$	(175)	$	(170)
Effect on fair value of a 20% increase		(338)		(330)
Weighted Average Discount Rate		10.75%		11.50%
Effect on fair value of a 10% increase	$	(154)	$	(186)
Effect on fair value of a 20% increase		(298)		(359)

The sensitivity calculations above are hypothetical and should not be considered to be predictive of future performance. As indicated, changes in value based on adverse changes in assumptions generally cannot be extrapolated because the relationship of the change in assumption to the change in value may not be linear. Also in this table, the effect of an adverse variation in a particular assumption on the value of the SBA servicing rights is calculated without changing any other assumption. While in reality, changes in one factor may magnify or counteract the effect of the change.

Off-Balance Sheet Financial Instruments (Disclosed at notional amounts)

Fair values for the Company's off-balance sheet financial instruments (lending commitments and letters of credit) are based on fees currently charged in the market to enter into similar agreements, taking into account, the remaining terms of the agreements and the counterparties' credit standing.

The estimated fair values of the Company's financial instruments at December 31, 2019 were as follows:

	Fair Value Measurements at December 31, 2019				
(dollars in thousands)	**Carrying Amount**	**Fair Value**	**Quoted Prices in Active Markets for Identical Assets (Level 1)**	**Significant Other Observable Inputs (Level 2)**	**Significant Unobservable Inputs (Level 3)**
Balance Sheet Data					
Financial assets:					
Cash and cash equivalents	$ 168,319	$ 168,319	$ 168,319	$ -	$ -
Investment securities available for sale	539,042	539,042	-	536,222	2,820
Investment securities held to maturity	644,842	653,109	-	653,109	-
Restricted stock	2,746	2,746	-	2,746	-
Loans held for sale	13,349	13,349	-	10,345	3,004
Loans receivable, net	1,738,929	1,731,876	-	-	1,731,876
SBA servicing assets	4,447	4,447	-	-	4,447
Accrued interest receivable	9,934	9,934	-	9,934	-
Interest rate lock commitments	362	362	-	362	-
Best efforts forward loan sales	4	4	-	4	-
Mandatory forward loan sales	2	2	-	2	-
Financial liabilities:					
Deposits					
Demand, savings and money market	$ 2,775,584	$ 2,775,584	$ -	$ 2,775,584	$ -
Time	223,579	224,095	-	224,095	-
Subordinated debt	11,265	8,540	-	-	8,540
Accrued interest payable	1,630	1,630	-	1,630	-
Interest rate lock commitments	-	-	-	-	-
Best efforts forward loan sales	133	133	-	133	-
Mandatory forward loan sales	83	83	-	83	-
Off-Balance Sheet Data					
Commitments to extend credit	-	-	-	-	-
Standby letters-of-credit	-	-	-	-	-

The estimated fair values of the Company's financial instruments at December 31, 2018 were as follows:

	Fair Value Measurements at December 31, 2018				
(dollars in thousands)	Carrying Amount	Fair Value	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Balance Sheet Data					
Financial assets:					
Cash and cash equivalents	$ 72,473	$ 72,473	$ 72,473	$ -	$ -
Investment securities available for sale	321,014	321,014	-	317,945	3,069
Investment securities held to maturity	761,563	747,323	-	747,323	-
Restricted stock	5,754	5,754	-	5,754	-
Loans held for sale	26,291	26,291	-	20,887	5,404
Loans receivable, net	1,427,983	1,410,945	-	-	1,410,945
SBA servicing assets	4,785	4,785	-	-	4,785
Accrued interest receivable	9,025	9,025	-	9,025	-
Interest rate lock commitments	410	410	-	410	-
Best efforts forward loan sales	5	5	-	5	-
Mandatory forward loan sales	10	10	-	10	-
Financial liabilities:					
Deposits					
Demand, savings and money market	$ 2,238,610	$ 2,238,610	$ -	$ 2,238,610	$ -
Time	154,257	152,989	-	152,989	-
Subordinated debt	11,259	8,279	-	-	8,279
Accrued interest payable	558	558	-	558	-
Interest rate lock commitments	-	-	-	-	-
Best efforts forward loan sales	138	138	-	138	-
Mandatory forward loan sales	230	230	-	230	-
Off-Balance Sheet Data					
Commitments to extend credit	-	-	-	-	-
Standby letters-of-credit	-	-	-	-	-

16. Stock Based Compensation

The Company has a Stock Option and Restricted Stock Plan ("the 2005 Plan"), under which the Company granted options, restricted stock or stock appreciation rights to the Company's employees, directors, and certain consultants. The 2005 Plan became effective on November 14, 1995, and was amended and approved at the Company's 2005 annual meeting of shareholders. Under the terms of the 2005 Plan, 1.5 million shares of common stock, plus an annual increase equal to the number of shares needed to restore the maximum number of shares that could be available for grant under the 2005 Plan to 1.5 million shares, were available for such grants. As of December 31, 2019, the only grants under the 2005 Plan were option grants. The 2005 Plan provided that the exercise price of each option granted equaled the market price of the Company's stock on the date of the grant. Options granted pursuant to the 2005 Plan vest within one to four years and have a maximum term of 10 years. The 2005 Plan terminated on November 14, 2015 in accordance with the terms and conditions specified in the Plan agreement.

On April 29, 2014 the Company's shareholders approved the 2014 Republic First Bancorp, Inc. Equity Incentive Plan (the "2014 Plan"), under which the Company may grant options, restricted stock, stock units, or stock appreciation rights to the Company's employees, directors, independent contractors, and consultants. Under the terms of the 2014 Plan, 2.6 million shares of common stock, plus an annual adjustment to be no less than 10% of the outstanding shares or such lower number as the Board of Directors may determine, are available for such grants. At December 31, 2019, the maximum number of common shares issuable under the 2014 Plan was 6.4 million shares. During the twelve months ended December 31, 2019, 1.4 million options were granted under the 2014 Plan with a fair value of $2,799,976. During 2019, options to purchase the Company's common stock were granted to certain employees and directors. The exercise price for the options granted was equal to the closing price of the Company's common stock on the date of grant. The options issued are subject to a one to four year vesting period and expire after ten years.

The Company utilized the Black-Scholes option pricing model to calculate the estimated fair value of each stock option granted on the date of the grant. A summary of the assumptions used in the Black-Scholes option pricing model for 2019, 2018, and 2017 is as follows:

	2019	2018	2017
Dividend yield(1)	0.0%	0.0%	0.0%
Expected volatility	28.81%(2)	28.22%(2)	44.00% to 50.09%(3)
Risk-free interest rate(4)	1.42% to 2.78%	2.35% to 2.96%	1.89% to 2.30%
Expected life(5)	6.25 years	6.25 years	5.5 to 7.0 years
Assumed forfeiture rate(6)	4.0%	4.0%	6.0%

(1) A dividend yield of 0.0% is utilized because cash dividends have never been paid.
(2) The expected volatility was based on the historical volatility of the Company's common stock price as adjusted for certain historical periods of extraordinary volatility in order to estimate expected volatility.
(3) Expected volatility is based on Bloomberg's five and one-half to seven year volatility calculation for "FRBK" stock.
(4) The risk-free interest rate is based on the five to seven year Treasury bond.
(5) The expected life reflects a 1 to 4 year vesting period, the maximum ten year term and review of historical behavior.
(6) Forfeiture rate is determined through forfeited and expired options as a percentage of options granted over the current three year period.

During 2019, 842,898 options vested as compared to 753,864 options in 2018 and 529,624 options in 2017. Expense is recognized ratably over the period required to vest. At December 31, 2019, the intrinsic value of the 4,979,475 options outstanding was $1.3 million, while the intrinsic value of the 2,611,960 exercisable (vested) options was $1.3 million. During 2019, 185,125 options were forfeited with a weighted average grant date fair value of $475,000.

Information regarding stock based compensation for the years ended December 31, 2019, 2018, and 2017 is set forth below:

	2019	2018	2017
Stock based compensation expense recognized	$ 2,632,000	$ 2,116,000	$ 1,842,000
Number of unvested stock options	2,367,515	1,962,163	1,659,102
Fair value of unvested stock options	$ 6,108,271	$ 5,550,820	$ 4,587,565
Amount remaining to be recognized as expense	$ 3,574,740	$ 3,406,394	$ 2,508,314

The remaining amount of $3.6 million will be recognized ratably as expense through October 2023.

A summary of stock option activity under the Plan as of December 31, 2019, 2018, and 2017 is as follows:

	For the Years Ended December 31,					
	2019		2018		2017	
	Shares	**Weighted Average Exercise Price**	**Shares**	**Weighted Average Exercise Price**	**Shares**	**Weighted Average Exercise Price**
Outstanding, beginning of year	3,861,650	$ 5.96	3,005,825	$ 4.98	2,332,900	$ 3.70
Granted	1,356,500	6.35	1,106,800	8.34	916,000	8.03
Exercised	(53,550)	4.88	(174,850)	3.83	(197,975)	3.26
Forfeited	(185,125)	6.76	(76,125)	6.80	(45,100)	7.95
Outstanding, end of year	4,979,475	$ 6.05	3,861,650	$ 5.96	3,005,825	$ 4.98
Options exercisable at year-end	2,611,960	$ 5.28	1,899,487	$ 4.53	1,346,723	$ 3.55
Weighted average fair value of options granted during the year		$ 2.15		$ 2.85		$ 3.75

A summary of stock option exercises and related proceeds during the years end December 31, 2019, 2018, and 2017 is as follows:

	For the Years Ended December 31,		
	2019	**2018**	**2017**
Number of options exercised	53,550	174,850	197,975
Cash received	$ 261,143	$ 670,413	$ 646,263
Intrinsic value	$ 72,187	$ 814,855	$ 991,957
Tax benefit	$ 5,159	$ 12,288	$ 81,589

The following table summarizes information about options outstanding at December 31, 2019:

	Options Outstanding			Options Exercisable	
Range of Exercise Prices	**Number Outstanding**	**Weighted-Average Remaining Contractual Life**	**Weighted-Average Exercise Price**	**Shares**	**Weighted-Average Exercise Price**
$1.55 to $3.53	516,200	2.5	$ 2.51	516,200	$ 2.51
$3.55 to $3.95	650,475	4.5	3.62	648,475	3.62
$3.99 to $7.85	1,928,125	5.7	5.69	423,874	4.17
$8.00 to $9.45	1,884,675	8.2	8.22	1,023,411	8.19
	4,979,475		$ 6.05	2,611,960	$ 5.28

A roll-forward of non-vested options during the year ended December 31, 2019 is as follows:

	Number of Shares	**Weighted-Average Grant Date Fair Value**
Nonvested, beginning of year	1,962,163	$ 2.83
Granted	1,356,500	2.15
Vested	(842,898)	2.83
Forfeited	(108,250)	2.83
Nonvested, end of year	2,367,515	$ 2.58

17. Segment Reporting

The Company has one reportable segment: community banking. The community banking segment primarily encompasses the commercial loan and deposit activities of Republic, as well as, residential mortgage and consumer loan products in the area surrounding its stores. Mortgage loans in Delaware and Florida are primarily made to local customers that have second homes (vacation) in Delaware and Florida. We do not have loan production offices in those states.

18. Transactions with Affiliates and Related Parties

The Company made payments to related parties in the amount of $1.4 million, $685,000, and $653,000 during 2019, 2018, and 2017, respectively. The disbursements made during 2019, 2018, and 2017 include $1.1 million, $400,000, and $361,000, respectively, in fees for marketing, graphic design, architectural and project management services paid to InterArch, a company owned by the spouse of Vernon W. Hill, II. Mr. Hill is the Chairman of the Company, and beneficially owns 8.2% of the common shares currently outstanding. The Company paid $158,000, $165,000 and $172,000 during 2019, 2018, and 2017 to Glassboro Properties, LLC related to a land lease agreement for its Glassboro store. Mr. Hill has an ownership interest in Glassboro Properties LLC, a commercial real estate firm.

The Company paid $120,000 during 2019, 2018 and 2017 to Brian Communications for public relations services in addition to reimbursements for out-of-pocket expenses and other reimbursable costs. Brian Tierney, a member of the Board of Directors, is the CEO of Brian Communications, a strategic communications agency.

19. Parent Company Financial Information

The following financial statements for Republic First Bancorp, Inc. (Parent Company) should be read in conjunction with the consolidated financial statements and the other notes related to the consolidated financial statements.

Balance Sheet
December 31, 2019 and 2018
(Dollars in thousands)

	December 31, 2019	December 31, 2018
ASSETS		
Cash	$ 6,327	$ 27,722
Corporation-obligated mandatorily redeemable capital securities of subsidiary trust holding junior obligations of the corporation	341	341
Investment in subsidiaries	245,158	220,864
Other assets	8,640	7,572
Total Assets	$ 260,466	$ 256,499
LIABILITIES AND SHAREHOLDERS' EQUITY		
Liabilities		
Accrued expenses	$ 33	$ 51
Corporation-obligated mandatorily redeemable securities of subsidiary trust holding solely junior subordinated debentures of the corporation	11,265	11,259
Total Liabilities	11,298	11,310
Shareholders' Equity		
Total Shareholders' Equity	249,168	245,189
Total Liabilities and Shareholders' Equity	$ 260,466	$ 256,499

Statements of Operations, Comprehensive Income, and Changes in Shareholders' Equity
For the years ended December 31, 2019, 2018, and 2017
(Dollars in thousands)

	2019	2018	2017
Interest income	$ 14	$ 13	$ 37
Total income	14	13	37
Trust preferred interest expense	476	441	1,225
Other expenses	3,662	4,972	1,424
Total expenses	4,138	5,413	2,649
Net loss before taxes	(4,124)	(5,400)	(2,612)
Benefit for income taxes	(917)	(1,640)	(914)
Loss before undistributed income of subsidiaries	(3,207)	(3,760)	(1,698)
Equity in undistributed income of subsidiaries	(293)	12,387	10,603
Net income (loss)	$ (3,500)	$ 8,627	$ 8,905
Net income (loss)	$ (3,500)	$ 8,627	$ 8,905
Total other comprehensive income (loss)	4,586	(2,778)	(215)
Total comprehensive income	$ 1,086	$ 5,849	$ 8,690
Shareholders' equity, beginning of year	$ 245,189	$ 226,460	$ 215,053
Stock based compensation	2,632	2,116	1,842
Exercise of stock options	261	670	646
Conversion of subordinated debt to common shares	-	10,094	229
Net income (loss)	(3,500)	8,627	8,905
Total other comprehensive income (loss)	4,586	(2,778)	(215)
Shareholders' equity, end of year	$ 249,168	$ 245,189	$ 226,460

Statements of Cash Flows
For the years ended December 31, 2019, 2018, and 2017
(Dollars in thousands)

	2019	2018	2017
Cash flows from operating activities:			
Net (loss) income	$ (3,500)	$ 8,627	$ 8,905
Adjustments to reconcile net (loss) income to net cash used in operating activities:			
Share based compensation	2,632	2,116	1,842
Amortization of debt issuance costs	6	6	29
Increase in other assets	(1,069)	(1,639)	(1,342)
Net increase (decrease) in other liabilities	(18)	20	(179)
Equity in undistributed income of subsidiaries	293	(12,387)	(10,603)
Net cash used in operating activities	(1,656)	(3,257)	(1,348)
Cash flows from investing activities:			
Investment in subsidiary	(20,000)	(30,000)	-
Net cash used in investing activities	(20,000)	(30,000)	-
Cash flows from financing activities:			
Exercise of stock options	261	670	646
Net cash provided by financing activities	261	670	646
Decrease in cash	(21,395)	(32,587)	(702)
Cash, beginning of period	27,722	60,309	61,011
Cash, end of period	$ 6,327	$ 27,722	$ 60,309

20. Quarterly Financial Data (unaudited)

The following represents summarized unaudited quarterly financial data of the Company for each of the quarters ended during 2019 and 2018.

Summary of Selected Quarterly Consolidated Financial Data
(dollars in thousands, except per share data)

	For the Quarter Ended			
	December 31st	**September 30th**	**June 30th**	**March 31st**
2019				
Interest income	$ 26,892	$ 26,208	$ 26,245	$ 25,519
Interest expense	6,978	6,826	6,874	6,379
Net interest income	19,914	19,382	19,371	19,140
Provision for loan losses	1,155	450	-	300
Non-interest income	5,213	6,554	7,026	4,945
Non-interest expense	27,488	27,824	25,911	23,267
Provision (benefit) for income taxes	(1,031)	(516)	105	92
Net income (loss)	$ (2,485)	$ (1,822)	$ 381	$ 426
Net income (loss) per share:				
Basic	$ (0.04)	$ (0.03)	$ 0.01	$ 0.01
Diluted	$ (0.04)	$ (0.03)	$ 0.01	$ 0.01
2018				
Interest income	$ 25,293	$ 23,558	$ 22,324	$ 20,899
Interest expense	5,313	4,412	3,662	2,783
Net interest income	19,980	19,146	18,662	18,116
Provision for loan losses	600	500	800	400
Non-interest income	4,888	5,131	5,768	4,535
Non-interest expense	22,057	20,833	20,729	20,102
Provision (benefit) for income taxes	54	622	530	372
Net income (loss)	$ 2,157	$ 2,322	$ 2,371	$ 1,777
Net income (loss) per share (1):				
Basic	$ 0.04	$ 0.04	$ 0.04	$ 0.03
Diluted	$ 0.04	$ 0.04	$ 0.04	$ 0.03

(1) Quarterly net income per share does not add to full year net income per share due to rounding.

21. Changes in Accumulated Other Comprehensive Income (Loss) By Component [(1)]

The following table presents the changes in accumulated other comprehensive loss by component, net of taxes, for the years ended December 31, 2019, 2018, and 2017.

(dollars in thousands)	Unrealized Gains (Losses) on Available-For-Sale Securities	Unrealized Holding Losses on Securities Transferred From Available-For-Sale To Held-To-Maturity	Total
Balance January 1, 2019	$ (4,736)	$ (7,191)	$ (11,927)
Unrealized gain on securities	4,284	-	4,284
Amounts reclassified from accumulated other comprehensive income to net income [(2)]	(823)	1,125	302
Net current-period other comprehensive income	3,461	1,125	4,586
Total change in accumulated other comprehensive income	3,461	1,125	4,586
Balance December 31, 2019	$ (1,275)	$ (6,066)	$ (7,341)
Balance January 1, 2018	$ (7,150)	$ (359)	$ (7,509)
Reclassification due to the adoption of ASU 2018-02	(1,562)	(78)	(1,640)
Unrealized gain on securities	3,927	-	3,927
Net unrealized holding losses on securities transferred from available-for-sale to held-to-maturity	-	(6,855)	(6,855)
Amounts reclassified from accumulated other comprehensive income to net income [(2)]	49	101	150
Net current-period other comprehensive income (loss)	3,976	(6,754)	(2,778)
Total change in accumulated other comprehensive income (loss)	2,414	(6,832)	(4,418)
Balance December 31, 2018	$ (4,736)	$ (7,191)	$ (11,927)
Balance January 1, 2017	$ (6,831)	$ (463)	$ (7,294)
Unrealized loss on securities	(413)	-	(413)
Amounts reclassified from accumulated other comprehensive income to net income [(2)]	94	104	198
Net current-period other comprehensive income (loss)	(319)	104	(215)
Total change in accumulated other comprehensive income (loss)	(319)	104	(215)
Balance December 31, 2017	$ (7,150)	$ (359)	$ (7,509)

(1) All amounts are net of tax. Amounts in parentheses indicate reductions to other comprehensive income.
(2) Reclassification amounts are reported as gains/losses on sales of investment securities, impairment losses, and amortization of net unrealized losses on the Consolidated Statement of Income.

22. Goodwill

The Company completed an annual impairment test for goodwill as of July 31, 2019 and 2018. Future impairment testing will be conducted as of July 31 on an annual basis, unless a triggering event occurs in the interim that would suggest impairment, in which case it would be tested as of the date of the triggering event. During the year ended December 31, 2019 and 2018, there was no goodwill impairment recorded. There can be no assurance that future impairment assessments or tests will not result in a charge to earnings.

On July 28, 2016, Republic acquired all of the issued and outstanding limited liability company interests of Oak Mortgage Company, LLC ("Oak Mortgage") and, as a result, Oak Mortgage became a wholly owned subsidiary of Republic on that date. The Company's goodwill related to the acquisition of Oak Mortgage in July 2016 is detailed below:

(dollars in thousands)	Balance December 31, 2018	Additions/ Adjustments	Amortization	Balance December 31, 2019	Amortization Period (in years)
Goodwill	$ 5,011	$ -	$ -	$ 5,011	Indefinite

(dollars in thousands)	Balance December 31, 2017	Additions/ Adjustments	Amortization	Balance December 31, 2018	Amortization Period (in years)
Goodwill	$ 5,011	$ -	$ -	$ 5,011	Indefinite

23. Derivatives and Risk Management Activities

Republic did not have any derivative instruments designated as hedging instruments, or subject to master netting and collateral agreements for the twelve months ended December 31, 2019 and 2018. The following table summarizes the amounts recorded in Republic's statement of financial condition for derivatives not designated as hedging instruments as of December 31, 2019 and December 31, 2018 (in thousands):

December 31, 2019	Balance Sheet Presentation	Fair Value	Notional Amount
Asset derivatives:			
IRLC's	Other Assets	$ 362	$ 14,586
Best efforts forward loan sales commitments	Other Assets	4	875
Mandatory forward loan sales commitments	Other Assets	2	288
Liability derivatives:			
IRLC's	Other Liabilities	$ -	$ -
Best efforts forward loan sales commitments	Other Liabilities	133	13,711
Mandatory forward loan sales commitments	Other Liabilities	83	9,614

December 31, 2018	Balance Sheet Presentation	Fair Value	Notional Amount
Asset derivatives:			
IRLC's	Other Assets	$ 410	$ 16,966
Best efforts forward loan sales commitments	Other Assets	5	1,639
Mandatory forward loan sales commitments	Other Assets	10	865
Liability derivatives:			
IRLC's	Other Liabilities	$ -	$ -
Best efforts forward loan sales commitments	Other Liabilities	138	15,327
Mandatory forward loan sales commitments	Other Liabilities	230	18,980

The following table summarizes the amounts recorded in Republic's statement of income for derivative instruments not designated as hedging instruments for the twelve months ended December 31, 2019, 2018, and 2017 (in thousands):

Twelve Months Ended December 31, 2019	**Income Statement Presentation**		**Gain/(Loss)**
Asset derivatives:			
IRLC's	Mortgage banking income	$	(48)
Best efforts forward loan sales commitments	Mortgage banking income		(1)
Mandatory forward loan sales commitments	Mortgage banking income		(8)
Liability derivatives:			
IRLC's	Mortgage banking income	$	-
Best efforts forward loan sales commitments	Mortgage banking income		5
Mandatory forward loan sales commitments	Mortgage banking income		147

Twelve Months Ended December 31, 2018	**Income Statement Presentation**		**Gain/(Loss)**
Asset derivatives:			
IRLC's	Mortgage banking income	$	47
Best efforts forward loan sales commitments	Mortgage banking income		-
Mandatory forward loan sales commitments	Mortgage banking income		(9)
Liability derivatives:			
IRLC's	Mortgage banking income	$	1
Best efforts forward loan sales commitments	Mortgage banking income		(45)
Mandatory forward loan sales commitments	Mortgage banking income		(35)

Twelve Months Ended December 31, 2017	**Income Statement Presentation**		**Gain/(Loss)**
Asset derivatives:			
IRLC's	Mortgage banking income	$	(76)
Best efforts forward loan sales commitments	Mortgage banking income		(98)
Mandatory forward loan sales commitments	Mortgage banking income		(210)
Liability derivatives:			
IRLC's	Mortgage banking income	$	54
Best efforts forward loan sales commitments	Mortgage banking income		32
Mandatory forward loan sales commitments	Mortgage banking income		(157)

The fair value of Republic's IRLCs, best efforts forward loan sales commitments, and mandatory forward loan sales commitments are based upon the estimated value of the underlying mortgage loan (determined consistent with "Loans Held for Sale"), adjusted for (1) estimated costs to complete and originate the loan, and (2) the estimated percentage of IRLCs that will result in a closed mortgage loan. The valuation of the IRLCs issued by Republic includes the value of the servicing released premium. Republic sells loans servicing released, and the servicing released premium is included in the market price.

24. Revenue Recognition

On January 1, 2018, the Company adopted ASU 2014-09 "*Revenue from Contracts with Customers*" *(Topic 606)* and all subsequent ASUs that modified Topic 606. As stated in Note 2 *Summary of Significant Accounting Policies,* the implementation of the new standard did not have a material impact on the measurement of recognition of revenue. Management determined that a cumulative effect adjustment to opening retained earnings was not deemed necessary. Results for reporting periods beginning January 1, 2018 are presented under Topic 606, while prior period amounts were not adjusted and continue to be reported in accordance with our historic accounting under Topic 605.

Topic 606 does not apply to revenue associated with financial instruments, including revenue from loans and investments. In addition, certain non-interest income streams such as gains on sales of residential mortgage and SBA loans, income associated with servicing assets, and loan fees, including residential mortgage originations to be sold and prepayment and late fees charged across all loan categories are also not in scope of the new guidance. Topic 606 is applicable to non-interest revenue streams such as service charges on deposit accounts. However, the recognition of these revenue streams did not change significantly upon adoption of Topic 606. Non-interest revenue streams in-scope of Topic 606 are discussed below.

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), ATM fees, NSF fees, and other deposit related fees.

The Company's performance obligation for account analysis fees and monthly services fees is generally satisfied, and the related revenue recognized, over the period in which the service is provided, which is typically one month. Revenue is recognized at month end after the completion of the service period and payment for these service charges on deposit accounts is primarily received through a direct charge to customers' accounts.

ATM fees, NSF fees, and other deposit related fees are largely transactional based, and therefore, the Company's performance obligation is satisfied, and the related revenue recognized, at a point in time. Payment for these service charges are received immediately through a direct charge to customers' accounts.

For the Company, there are no other material revenue streams within the scope of Topic 606.

The following tables present non-interest income, segregated by revenue streams in-scope and out-of-scope of Topic 606, for the twelve months ended December 31, 2019, 2018, and 2017.

	Twelve Months Ended December 31,		
(dollars in thousands)	**2019**	**2018**	**2017**
Non-interest income			
In-scope of Topic 606			
Service charges on deposit accounts	$ 7,541	$ 5,476	$ 3,904
Other non-interest income	214	174	177
Non-interest income (in-scope of Topic 606)	7,755	5,650	4,081
Non-interest income (out-of-scope of Topic 606)	15,983	14,672	16,016
Total non-interest income	$ 23,738	$ 20,322	$ 20,097

Contract Balances

A contract assets 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 non-interest revenue streams are largely based on transaction activity, or standard month-end revenue accruals. 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 long-term contracts with customers, and therefore, does not experience significant contract balances. As of December 31, 2019, 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 as an 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 assets 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.

25. Leases

In February 2016, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-02, "Leases (Topic 842)" ("ASU 2016-02"). The FASB issued this ASU to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet by lessees for those leases classified as operating leases under current U.S. GAAP and disclosing key information about leasing arrangements. The new standard was adopted by the Company on January 1, 2019. ASU 2016-02 provides for a modified retrospective transition approach requiring lessees to recognize and measure leases on the balance sheet at the beginning of either the earliest period presented or as of the beginning of the period of adoption. The Company elected to apply ASU 2016-02 as of the beginning of the period of adoption (January 1, 2019) and will not restate comparative periods. Adoption of ASU 2016-02 resulted in the recognition of total operating lease liability obligations totaling $35.1 million and the recognition of operating lease right-of-use assets totaling $34.2 million at the date of adoption. The initial balance sheet gross up upon adoption was related to operating leases on land and buildings for twenty-three lease agreements. The Company has no finance leases or material subleases for which it is the lessor of property. The Company has elected to apply the package of practical expedients allowed by the new standard under which the Company need not reassess whether any expired or existing contracts are leases or contain leases, the Company need not reassess the lease classification for any expired or existing lease, and the Company need not reassess initial direct costs for any existing leases.

At January 1, 2019, the Company had thirty-four operating leases for real property, which includes operating leases for fifteen branch locations, eight offices that are used for general office space, and eleven operating leases for equipment. All of the real property operating leases include one or more options to extend the lease term. Five of the operating leases for branch locations are land leases where the Company is responsible for the construction of the building on the property.

At December 31, 2019, the Company had thirty-seven operating lease agreements, which include operating leases for seventeen branch locations, seven offices that are used for general office space, and thirteen operating leases for equipment. Two of the real property operating leases did not include one or more options to extend the lease term. Five of the operating leases for branch locations are land leases where the Company is responsible for the construction of the building on the property. The thirty-seven operating leases have maturity dates ranging from January 2020 to December 2058 most of which include options for multiple five and ten year extensions which the Company is reasonably certain to exercise. No operating leases include variable lease payments that are based on an index or rate, such as the CPI. The weighted average remaining operating lease term for these leases is 19.75 years as of December 31, 2019.

The discount rate used in determining the operating lease liability obligation for each individual lease was the assumed incremental borrowing rate for the Company that corresponded with the remaining lease term as of January 1, 2019 for leases that existed at adoption and as of the lease commencement date for leases subsequently entered in to. The weighted average operating lease discount rate was 3.58% as of December 31, 2019.

The following table presents operating lease costs net of sublease income for the twelve months ended December 31, 2019.

(dollars in thousands)		**Twelve Months Ended December 31, 2019**
Operating lease cost	$	6,817
Sublease income		(302)
Total lease cost	$	6,515

Rent expense was approximately $4.4 million and $4.0 million for the years ended December 31, 2018 and 2017, respectively.

The following table presents a maturity analysis of total operating lease liability obligations and reconciliation of the undiscounted cash flows to total operating lease liability obligations at December 31, 2019.

(dollars in thousands)		**December 31, 2019**
Operating lease payments due:		
Within one year	$	7,221
One to three years		11,385
Three to five years		10,028
More than five years		70,721
Total undiscounted cash flows		99,355
Discount on cash flows		(30,499)
Total operating lease liability obligations	$	68,856

The following table presents cash and non-cash activities for the twelve months ended December 31, 2019.

(dollars in thousands)		Twelve Months Ended December 31, 2019
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	$	5,387
Non-cash investing and financing activities		
Additions to Operating leases – right of use asset		
New operating lease liability obligation	$	72,648

Tel: 215-564-1900
Fax: 215-564-3940
www.bdo.com

Ten Penn Center
1801 Market Street, Suite 1700
Philadelphia, PA 19103

Report of Independent Registered Public Accounting Firm

Shareholders and Board of Directors
Republic First Bancorp, Inc.
Philadelphia, Pennsylvania

Opinion on Internal Control over Financial Reporting

We have audited Republic First Bancorp, Inc.'s (the "Company's") internal control over financial reporting as of December 31, 2019, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (the "COSO criteria"). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2019, 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 balance sheets of the Company and subsidiaries as of December 31, 2019 and 2018, the related consolidated statements of operations, comprehensive income, changes in shareholders' equity, and cash flows for each of the three years in the period ended December 31, 2019, and the related notes and our report dated March 16, 2020 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 Item 9A, Management's Report on Internal Controls. 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 U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit of internal control over financial reporting 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, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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.

BDO USA, LLP

Philadelphia, Pennsylvania
March 16, 2020

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

None.

Item 9A: Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures designed to provide reasonable assurance that information required to be disclosed in reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the Securities and Exchange Commission's rules and forms and accumulated and communicated to the Company's management, including the Company's principal executive officer and principal financial officer, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

The Company's management, with the participation of the principal executive officer and the principal financial officer, conducted an evaluation, as of the end of the period covered by this report, of the effectiveness of the Company's disclosure controls and procedures, as such term is defined in Exchange Act Rule 13a-15(e). Based on this evaluation, the principal executive officer and the principal financial officer have concluded that, as of the end of the period covered by this report, the Company's disclosure controls and procedures, as defined in Rule 13a-15(e), were effective at the reasonable assurance level.

Changes in Internal Controls

The principal executive officer and principal financial officer also conducted an evaluation of the Company's internal control over financial reporting ("Internal Control") to determine whether any changes in Internal Control occurred during the quarter ended December 31, 2019 that have materially affected or which are reasonably likely to materially affect Internal Control. Based on that evaluation, there has been no such change during the quarter ended December 31, 2019.

Management's Report on Internal Controls

Management of Republic First Bancorp, Inc. (the "Company") is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act.

The Company's management, under the supervision and with the participation of the principal executive officer and principal financial officer, conducted an evaluation of the effectiveness of internal control over financial reporting, as of December 31, 2019, based on the framework in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on this evaluation under the framework in Internal Control – Integrated Framework 2013, management of the Company has concluded the Company maintained effective internal control over financial reporting, as such term is defined in Securities Exchange Act of 1934 Rules 13a-15(f), as of December 31, 2019.

Limitations on the Effectiveness of Controls

Control systems, no matter how well designed and operated, can provide only reasonable, not an absolute, level of assurance that the objectives of the control system are met. The design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Further, because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud, if any, have been detected. The design of any system of controls is based in part on certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Projections of any evaluation of the effectiveness of controls to future periods are subject to risks. Over time, controls may become inadequate because of changes in conditions or deterioration in the degree of compliance with policies or procedures.

BDO, an independent registered public accounting firm, has audited the Company's consolidated financial statements as of and for the years ended December 31, 2019 and 2018, and the effectiveness of the Company's internal control over financial reporting as of December 31, 2019, as stated in their reports, which are included herein.

Item 9B: Other Information

None

PART III

Item 10: Directors, Executive Officers and Corporate Governance

Except as set forth below, the information required by this Item is incorporated by reference from the definitive proxy materials of the Company to be filed with the Securities and Exchange Commission in connection with the Company's 2020 annual meeting of shareholders, including, but not necessarily limited to, the sections entitled "Board of Directors and Committees" and "Executive Officers and Compensation."

The Company has adopted a code of ethics that applies to the Company's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. The text of the Company's code of ethics is available on the Company's website at www.myrepublicbank.com. We intend to disclose any changes in or revision to our code of ethics on our website, if applicable.

Item 11: Executive Compensation

The information required by this Item is incorporated by reference from the definitive proxy materials of the Company to be filed with the Securities and Exchange Commission in connection with the Company's 2020 annual meeting of shareholders, including, but not necessarily limited to, the section entitled "Executive Officers and Compensation."

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

Except as set forth below, the information required by this Item is incorporated by reference from the definitive proxy materials of the Company to be filed with the Securities and Exchange Commission in connection with the Company's 2020 annual meeting of shareholders, including, but not necessarily limited to, the section entitled "Security Ownership of Certain Beneficial Owners and Management."

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

Plan Category	Number of Shares to be Issued Upon Exercise of Outstanding Options, Warrants and Rights	Weighted-Average Exercise Price of Outstanding Options, Warrants and Rights	Number of Shares Remaining Available for Future Issuance Under Equity Compensation Plans (Excluding Securities Reflected in First Column)
Equity compensation plans approved by security holders	4,979,475	$ 6.05	2,083,235 (1) (2)
Equity compensation plans not approved by security holders	-	-	-
Total	4,979,475	$ 6.05	2,083,235 (1) (2)

(1) Pursuant to the terms of the Stock Option and Restricted Stock Plan, as amended and restated in 2005, no additional equity awards were issuable after November 14, 2015.

(2) The 2014 Republic First Bancorp, Inc. Equity Incentive Plan provides for 2,600,000 shares of common stock plus an annual adjustment to be no less than 10% of the outstanding shares or such lower number as the Board of Directors may determine, to be available for such grants.

Item 13: Certain Relationships and Related Transactions, and Director Independence

The information required by this Item is incorporated by reference from the definitive proxy materials of the Company to be filed with the Securities and Exchange Commission in connection with the Company's 2020 annual meeting of shareholders, including, but not necessarily limited to, the sections entitled "Certain Relationships and Related Transactions" and "Board of Directors and Committees."

Item 14: Principal Accountant Fees and Services

The information required by this Item is incorporated by reference from the definitive proxy materials of the Company to be filed with the Securities and Exchange Commission in connection with the Company's 2020 annual meeting of shareholders, including, but not necessarily limited to, the section entitled "Information Regarding Independent Registered Public Accounting Firm".

PART IV

Item 15: Exhibits, Financial Statement Schedules

(a) (1) The following financial statements and related documents of Republic First Bancorp, Inc. are filed as part of this Annual Report on Form 10-K in Part II – Item 8 "Financial Statements and Supplementary Data":

a. Consolidated Balance Sheets as of December 31, 2019 and 2018;
b. Consolidated Statements of Operations for the years ended December 31, 2019, 2018, and 2017;
c. Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2019, 2018, and 2017;
d. Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018, and 2017;
e. Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2019, 2018, and 2017; and
f. Notes to Consolidated Financial Statements.

(a) (2) None

(a) (3) The exhibits filed or furnished, as applicable, as part of this report are listed under Exhibits at subsection (b) of this Item 15.

(b) Exhibits

The following Exhibits are filed as part of this report.

Exhibit Number	Description	Location
3.1	Amended and Restated Articles of Incorporation of Republic First Bancorp, Inc.	Incorporated by reference to Form 10-K filed March 10, 2017
3.2	Amended and Restated By-Laws of Republic First Bancorp, Inc.	Incorporated by reference to Form S-1 filed April 23, 2010 (333-166286)
4.1	The Company will furnish to the SEC upon request copies of the following documents relating to the Company's Floating Rate Junior Subordinated Debt Securities due 2037: (i) Indenture dated as of December 27, 2006, between the Company and Wilmington Trust Company, as trustee; (ii) Amended and Restated Declaration of Trust of Republic Capital Trust II, dated as of December 27, 2006; and (iii) Guarantee Agreement dated as of December 27, 2006, between the Company and Wilmington Trust Company, as trustee, for the benefit of the holders of the capital securities of Republic Capital Trust II	

Exhibit Number	Description	Location
4.2	The Company will furnish to the SEC upon request copies of the following documents relating to the Company's Floating Rate Junior Subordinated Debt Securities due 2037: (i) Indenture dated as of June 28, 2007, between the Company and Wilmington Trust Company, as trustee; (ii) Amended and Restated Declaration of Trust of Republic Capital Trust III, dated as of June 28, 2007; and (iii) Guarantee Agreement dated as of June 28, 2007, between the Company and Wilmington Trust Company, as trustee, for the benefit of the holders of the capital securities of Republic Capital Trust III	
4.3	The Company will furnish to the SEC upon request copies of the following documents relating to the Company's Fixed Rate Junior Subordinated Convertible Debt Securities due 2038: (i) Indenture dated as of June 10, 2008, between the Company and Wilmington Trust Company, as trustee; (ii) Amended and Restated Declaration of Trust of Republic First Bancorp Capital Trust IV, dated as of June 10, 2008; and (iii) Guarantee Agreement dated as of June 10, 2008, between the Company and Wilmington Trust Company, as trustee, for the benefit of the holders of the capital securities of Republic First Bancorp Capital Trust IV	
4.4	Description of Capital Securities	Filed Herewith
10.1	Form of Employment Agreement, dated July 1, 2015, by and among, certain named Executive Officers, Republic First Bancorp, Inc. and Republic First Bank*	Incorporated by reference to Form 8-K filed July 14, 2015
10.2	Amended and Restated Stock Option Plan and Restricted Stock Plan*	Incorporated by reference to Form 10-K filed March 10, 2008
10.3	Deferred Compensation Plan*	Incorporated by reference to Form 10-K filed March 16, 2010
10.4	Amended and Restated Supplemental Retirement Plan Agreements between Republic First Bank and Certain Directors*	Incorporated by reference to Form 10-Q filed November 7, 2008

Exhibit Number	Description	Location
10.5	Purchase Agreement among Republic First Bancorp, Inc., Republic First Bancorp Capital Trust IV, and Purchasers of the Trust IV Capital Securities	Incorporated by reference to Form 10-Q filed November 7, 2008
10.6	Registration Rights Agreement among Republic First Bancorp, Inc. and the Holders of the Trust IV Capital Securities	Incorporated by reference to Form10-Q filed November 7, 2008
10.7	Agreement, dated March 9, 2017, between Republic First Bancorp, Inc. and Vernon W. Hill II	Incorporated by reference to Form 10-K filed March 10, 2017
10.8	Employment Agreement, dated May 10, 2013, by and among Harry D. Madonna, Republic First Bancorp, Inc., and Republic First Bank*	Incorporated by reference to Form 10-Q filed May 10, 2013
10.9	First Amendment to Employment Agreement, dated March 18, 2015, by and among Harry D. Madonna, Republic First Bancorp, Inc. and Republic First Bank*	Incorporated by reference to Form 8-K filed March 20, 2015
10.10	Form of Option Award*	Incorporated by reference to Form S-1 filed April 23, 2010 (333-166286)
10.11	Republic First Bancorp, Inc. 2014 Equity Incentive Plan*	Incorporated by reference to the definitive proxy statement on Schedule 14A filed March 26, 2014
10.12	Form of Incentive Stock Option Award – 2014 Equity Incentive Plan*	Incorporated by reference to Form 10-K filed March 13, 2015
10.13	Form of Nonqualified Stock Option Award – 2014 Equity Incentive Plan*	Incorporated by reference to Form 10-K filed March 13, 2015
10.14	Form of Investment Agreement	Incorporated by reference to Form 8-K filed April 22, 2014
10.15	Limited Liability Company Purchase Agreement dated July 26, 2016 by and among, Republic First Bank d/b/a Republic Bank and Owners of Oak Mortgage Company, LLC	Incorporated by reference to form 8-K filed August 1, 2016
21.1	Subsidiaries of the Company	Filed Herewith
23.1	Consent of BDO USA, LLP	Filed Herewith
31.1	Rule 13a-14(a)/15d-14(a) Certification of Chairman and Chief Executive Officer of Republic First Bancorp, Inc.	Filed Herewith

Exhibit Number	Description	Location
31.2	Rule 13a-14(a)/15d-14(a) Certification of Chief Financial Officer of Republic First Bancorp, Inc.	Filed Herewith
32.1	Section 1350 Certification of Harry D. Madonna	Furnished Herewith
32.2	Section 1350 Certification of Frank A. Cavallaro	Furnished Herewith
101	The following materials from the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2019, formatted in XBRL (eXtensible Business Reporting Language); (i) Consolidated Balance Sheets as of December 31, 2019 and December 31, 2018, (ii) Consolidated Statements of Operations for the years ended December 31, 2019, 2018, and 2017, (iii) Consolidated Statements of Comprehensive Income (Loss) for the years ended December 31, 2019, 2018, and 2017, (iv) Consolidated Statements of Cash Flows for the years ended December 31, 2019, 2018, and 2017, (v) Consolidated Statements of Changes in Shareholders' Equity for the years ended December 31, 2019, 2018, and 2017, and (vi) Notes to Consolidated Financial Statements.	

* Constitutes a management compensation agreement or arrangement.

(c) All financial statement schedules are omitted because the required information is not present or not present in amounts sufficient to require submission of the schedule or because the information required is included in the respective financial statements or notes thereto contained herein.

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.

REPUBLIC FIRST BANCORP, INC.

Date: March 16, 2020	By: /s/ Harry D. Madonna Harry D. Madonna President and Chief Executive Officer (principal executive officer)
Date: March 16, 2020	By: /s/ Frank A. Cavallaro Frank A. Cavallaro Executive Vice President and Chief Financial Officer (principal financial and accounting officer)

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 16, 2020	By: /s/ Vernon W. Hill, II Vernon W. Hill, II, Chairman of the Board
Date: March 16, 2020	By: /s/ Andrew B. Cohen Andrew B. Cohen, Director
Date: March 16, 2020	By: /s/ Theodore J. Flocco, Jr. Theodore J. Flocco, Jr., Director
Date: March 16, 2020	By: /s/ Lisa R. Jacobs Lisa R. Jacobs, Director
Date: March 16, 2020	By: /s/ Harry D. Madonna Harry D. Madonna, Director
Date: March 16, 2020	By: /s/ Barry L. Spevak Barry L. Spevak, Director
Date: March 16, 2020	By: /s/ Brian P. Tierney Brian P. Tierney, Director
Date: March 16, 2020	By: /s/ Harris Wildstein, Esq. Harris Wildstein, Esq., Director

Exhibit 21.1

SUBSIDIARIES OF THE COMPANY

Subsidiary Name	Jurisdiction of Organization
Subsidiaries of Republic First Bancorp, Inc.	
Republic First Bank (dba Republic Bank)	Pennsylvania
Republic Capital Trust II	Delaware
Republic Capital Trust III	Delaware

Tel: 215-564-1900
Fax: 215-564-3940
www.bdo.com

Ten Penn Center
1801 Market Street, Suite 1700
Philadelphia, PA 19103

Exhibit 23.1

Consent of Independent Registered Public Accounting Firm

Republic First Bancorp, Inc
Philadelphia, Pennsylvania

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (No. 333-196024 and No. 333-228279) and Form S-8 (No. 333-200868) of Republic First Bancorp, Inc. and subsidiaries of our reports dated March 16, 2020, relating to the consolidated financial statements, and the effectiveness of Republic First Bancorp, Inc.'s internal control over financial reporting, which appear in this Form 10-K.

BDO USA, LLP

Philadelphia, Pennsylvania
March 16, 2020

Exhibit 31.1

REPUBLIC FIRST BANCORP, INC.
CERTIFICATIONS PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Harry D. Madonna, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2019 of Republic First Bancorp, Inc.;

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

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

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

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

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

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

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

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 16, 2020 /s/ Harry D. Madonna
President and Chief Executive Officer

Exhibit 31.2

REPUBLIC FIRST BANCORP, INC.
CERTIFICATIONS PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Frank A. Cavallaro, certify that:

1. I have reviewed this Annual Report on Form 10-K for the year ended December 31, 2019 of Republic First Bancorp, Inc.;

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

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

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

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

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

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

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

5. The registrant's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 16, 2020 /s/ Frank A. Cavallaro

Executive Vice President and Chief Financial Officer

Exhibit 32.1

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K for the fiscal year ended December 31, 2019, as filed with the Securities and Exchange Commission by Republic First Bancorp, Inc. (the "Company") on the date hereof (the "Report"), I, Harry D. Madonna, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: March 16, 2020 /s/ Harry D. Madonna
President and Chief Executive Officer

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Section 1350 of Chapter 63 of Title 18 of the United States Code) and is not being filed as part of the Report or as a separate disclosure document.

Exhibit 32.2

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Annual Report on Form 10-K for the fiscal year ended December 31, 2018, as filed with the Securities and Exchange Commission by Republic First Bancorp, Inc. (the "Company") on the date hereof (the "Report"), I, Frank A. Cavallaro, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to the best of my knowledge:

(1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and result of operations of the Company.

Date: March 16, 2020 /s/ Frank A. Cavallaro
Executive Vice President and Chief Financial Officer

The foregoing certification is being furnished solely pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (Section 1350 of Chapter 63 of Title 18 of the United States Code) and is not being filed as part of the Report or as a separate disclosure document.

CORPORATE INFORMATION

Headquarters
Republic First Bancorp, Inc.
Two Liberty Place
50 S. 16th Street, Suite 2400
Philadelphia, PA 19102
888.875.2265

Annual Shareholders' Meeting
Wednesday, April 29, 2019 at 5pm
The Union League of Philadelphia
140 South Broad Street
Philadelphia, PA 19102

Certified Public Accountants
BDO USA, LLP
1801 Market Street
Ten Penn Center, Suite 1700
Philadelphia, PA 19103

Transfer Agent/Registrar
Computershare
P.O. Box 43078
Providence, RI 02940-3078
800.368.5948

Stock Exchange Listing
National NASDAQ Symbol: FRBK

Shareholder Information
For a copy of the Report filed on Form 10K with the Securities and Exchange Commission and for all other shareholder related information, please contact Investor Relations or visit our website at: my**republic**bank.com

REPUBLIC BANK