2017
ANNUAL REPORT

PathFinder
BANCORP, INC.

PathFinder
BANCORP, INC.

Our Purpose

To be the Local Bank Our Community Trusts.

Our Vision

Local

We have proudly served Central New York for over 150 years. Like our customers, we live, work and play here. That fact not only allows us to know our customers better, but gives our customers access to decision makers right here in Central New York.

Community

Our success is intertwined with the success of the communities we serve. For that reason, and because it is the right thing to do, we invest our resources, time, and talents in those communities.

Trust

Because we want to serve our local communities for another 150 years, we must earn the trust of our customers every day. We do that by being ethical, capable, honest, reliable and responsive. We do not sell products and services to our customers. We listen, and inquire, to determine our customers' needs. Then, with the help of a team of trusted advisors, we develop a program of services and products to uniquely satisfy those needs.

FINANCIAL HIGHLIGHTS

	2017	2016	2015	2014	2013
YEAR END (IN THOUSANDS EXCEPT PER SHARE AMOUNTS)					
Total assets	$881,257	$749,034	$623,254	$561,024	$503,793
Investment securities (AFS)	171,138	141,955	98, 942	88,073	80,959
Investment securities (HTM)	66,196	54,645	44,297	40,875	34,412
Loans receivable, net	573,705	485,900	424,732	382,189	336,592
Deposits	723,603	610,983	490,315	415,568	410,140
Borrowings and subordinated debt	88,947	73,972	56,291	71,255	46,008
Shareholders' equity	62,144	58,361	71,229	69,204	43,070
FOR THE YEAR (IN THOUSANDS)					
Net interest income	$23,123	$20,289	$18,767	$17,085	$15,619
Core noninterest income (a)	3,653	3,629	3,716	3,415	2,581
Net gains on sales, redemptions and impairment of investment securities	489	594	422	310	365
Net gains/(losses) on sales of loans and foreclosed real estate	37	(40)	34	34	470
Noninterest expense (b)	20,715	18,765	17,179	15,287	14,336
Regulatory assessments	473	345	408	398	415
Interest income	29,413	24,093	21,424	19,699	18,883
Interest expense	6,290	3,804	2,657	2,614	3,264
Provision for loan losses	1,769	953	1,349	1,205	1,032
Net income attributable to the Company	3,491	3,272	2,889	2,745	2,406
PER SHARE					
Net income (basic) (c)	$0.86	$0.79	$0.67	$0.64	$0.58
Net income (diluted) (c)	0.83	0.78	0.66	0.63	0.58
Book value per common share	14.44	13.67	13.28	12.82	11.33
Tangible book value per common share (d)	13.34	12.55	12.19	11.78	10.16
Cash dividends declared	0.215	0.20	0.16	0.12	0.12
PERFORMANCE RATIOS					
Return on average assets	0.42%	0.48%	0.48%	0.51%	0.48%
Return on average equity	5.69	5.35	4.08	5.50	5.86
Return on average tangible equity (d)	6.16	5.80	4.46	6.11	6.47
Return on average common equity	5.69	5.35	5.00	7.45	8.58
Average equity to average assets	7.47	8.97	11.76	9.27	8.24
Equity to total assets at end of period	7.01	7.73	11.36	12.26	8.55
Dividend payout ratio (e)	25.21	25.18	25.22	13.89	12.47
Net interest rate spread	2.83	3.03	3.21	3.31	3.23
Net interest margin	2.97	3.14	3.31	3.40	3.34
Average interest-earning assets to average interest-bearing liabilities	116.05	118.35	121.73	117.88	115.85
Noninterest income to average assets	0.51	0.61	0.69	0.70	0.69
Noninterest expense to average assets	2.58	2.81	2.92	2.92	2.96
Efficiency ratio (f)	79.13	79.90	78.22	76.51	79.14
ASSET QUALITY RATIOS					
Nonperforming loans as a percent of total loans	0.84%	0.98%	1.24%	1.61%	1.57%
Nonperforming assets as a percent of total assets	0.61	0.72	0.94	1.16	1.18
Allowance for loan losses to loans receivable	1.23	1.27	1.33	1.38	1.48
Allowance for loan losses as a percent of nonperforming loans	145.61	129.85	107.30	85.50	94.22
REGULATORY CAPITAL RATIOS (BANK ONLY)					
Total Core Capital (to Risk-Weighted Assets)	13.97%	14.79%	16.22%	16.60%	14.13%
Tier 1 Capital (to Risk-Weighted Assets)	12.72	13.54	14.95	15.31	12.82
Tier 1 Common Equity (to Risk-Weighted Assets)	12.72	13.54	14.95	15.31	12.82
Tier 1 Capital (to adjusted assets)	8.16	9.06	10.00	10.55	8.72
NUMBER OF					
Banking offices	10	9	9	9	8
Full-time equivalent employees	140	133	124	122	112

(a) Exclusive of net gains on sales, redemptions and impairment of investment securities and net gains (losses) on sales of loans and foreclosed real estate.

(b) Exclusive of regulatory assessments.

(c) Adjusted to reflect the 1.6472 exchange ratio used in the conversion for 2014 and prior years.

(d) Tangible equity excludes intangible assets.

(e) The dividend payout ratio is calculated using dividends declared and not waived by Pathfinder Bancorp, MHC for periods prior to the Conversion and Offering that occurred on October 16, 2014.

(f) The efficiency ratio is calculated as noninterest expense divided by the sum of net interest income and noninterest income, excluding net gains on sales, redemptions and impairment of investment securities and net gains (losses) on sales of loans and foreclosed real estate.

Chris R. Burritt
Chairman of the Board

Thomas W. Schneider
President and CEO

ANNUAL SHAREHOLDER REPORT

On behalf of the Board of Directors of Pathfinder Bancorp, Inc., we are pleased to present our 2017 Annual Report to Shareholders. We are proud of our people who have produced, serviced, and risk-managed through a year of historic growth; however, we are not fully satisfied with our ability to convert a strong, diversified, organic balance sheet into return metrics that meet our expectations.

We are also firmly committed to doing the necessary work that continues to build value for our franchise, our owners, our customers, our community and our staff of hard working banking and financial service professionals.

Our results, our resolve, and commitment forward as well as our Vision for our growing franchise is centered on:

- Being a trusted source and provider of financial solutions for our customers.
- Building a diversified balance sheet through organic, regional growth of deposit gathering and lending.
- Providing strong risk management and compliance capability to ensure long-term value build.
- Managing capital to provide a strong total return through a sustainable, valued business model that earns continued trust in our markets.
- Providing pathways to success and value build for our employees.
- Engaging and providing leadership in our communities to strengthen the economic, social, cultural and civic fabric of our communities.

OUR MARKET

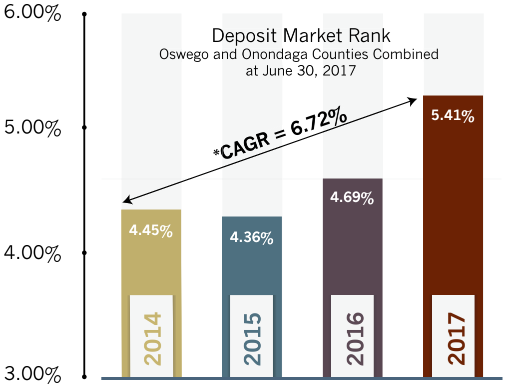
Comprised of the Central New York region, and to a lesser but growing extent, the Mohawk Valley and Finger Lakes regions of New York, our communities are centered along the old industrial complexes fostered by the transportation channel of the Erie Canal. We believe the economy initially built on these complexes, many now gone, is in the early cycles of a revitalization and reinvention that includes:

- Re-urbanization of our cities.
- Closer alignment of government, business and academic sectors.
- Leveraging of our outstanding higher education and health care institutions.
- Workforce development and anti-poverty initiatives that foster entrepreneurism and employment.
- Technology and energy production and distribution.
- Small manufacturing growth, as well as a core of larger manufacturers that remain committed to the excellent work force and quality of life in Upstate New York.

This revitalization and economic reinvention is following a shallow, but sustainable growth path. The business, consumer, and municipal customers in this market demonstrate by their support, a desire to work with Pathfinder Bank and align with our vision and purpose to be "the Local Bank our Community Trusts."

The record rate of growth of customer base and balance sheet that we have achieved is clearly being driven more from being sought by our customers and community, rather than through aggressive prospecting.

The market (our customers and our community partners) is stating, through testimony and action, that it regards and values our community based approach to banking. The tremendous efforts and outcomes achieved by our employees to meet the demands of this organic growth, while building our competencies and our systems and maintaining disciplined risk management focus is also a testament to our staff's commitment to our business and our vision.



*Compound Annual Growth Rate

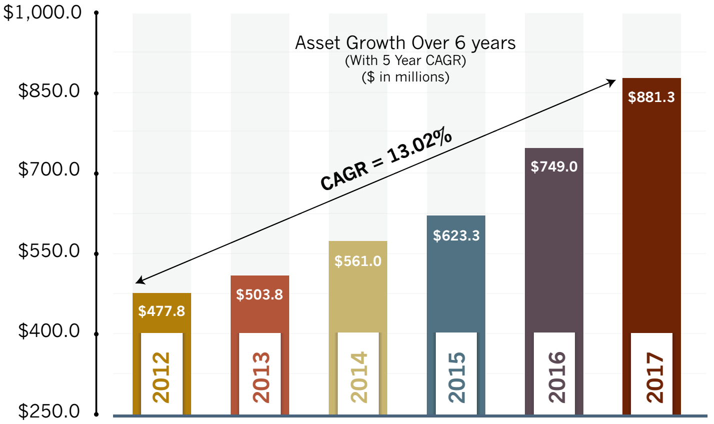
OUR MODEL

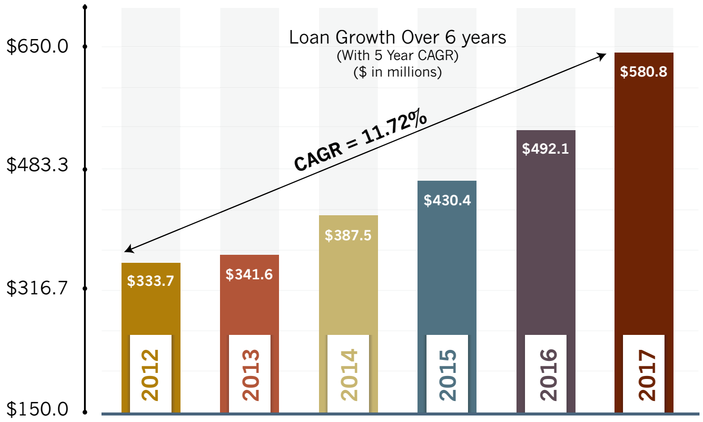
We firmly believe the key driver of our growth is building trust by being very intentional in how a community bank should serve our community.

This trust build needs to be earned daily, and we do so through leadership, and engagement to strengthen the core of our communities. Our vision of Local, Community, Trust, is not merely a marketing tag line, but the message we put forth into our communities and throughout our organization, and then it is the message we seek to live as we serve each other.

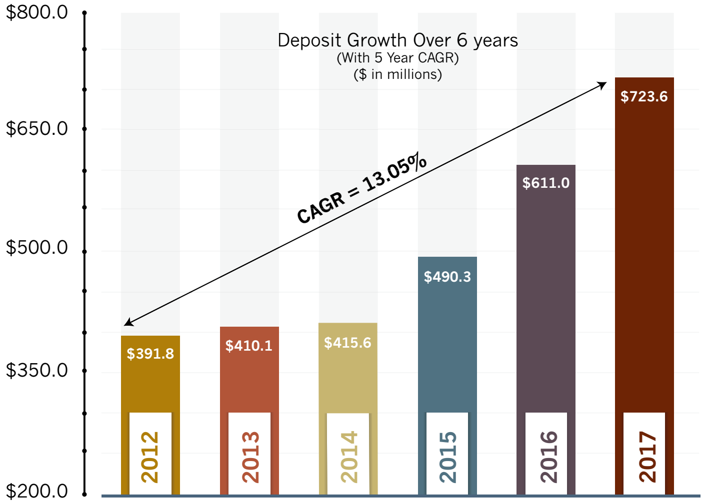
PERFORMANCE AND RESULTS

Balance sheet growth has been the primary driver of our performance over the last five years. Meeting the needs of our business, consumer, and residential community through our full-service lending products, continues to accelerate. This acceleration is both a function of our expansion within our primary market and, more importantly, a response to increased demand for our services. This increased demand results from combining: the positive economic vitality of our region; our reputation in the market towards working hard on our customers' behalf to provide for their needs; and a reflection of our growing brand awareness as an engaged community bank striving to solve and build for the communities we serve and represent.





Growth of our deposit base has maintained the pace necessary to fund our loan originations, but will require an expansion of ease of access for our Onondaga County customers, and an upgrade in electronic delivery platforms for our larger business customers.



As we move through our strategic objectives in 2018 and 2019, these delivery and platform expansions will be a vital component of our continued success.

Below is a sampling of the balance sheet movements over the past year:

($ in millions)	DECEMBER 2017	DECEMBER 2016	$ CHANGE	% CHANGE
LOANS				
Residential Mortgages	$222	$208	$14	6.7%
Commercial Real Estate	193	151	42	27.8%
Commercial Term Loans	101	90	11	12.2%
Municipal Loans	10	13	(3)	-23.1%
Consumer Loans	55	31	24	77.4%
DEPOSITS				
Retail	$453	$343	$110	32.1%
Business	105	105	0	0%
Municipal	165	162	3	1.9%

RETURNS

While balance sheet growth has driven net interest revenue higher, the disproportionate increase in short-term interest rates has flattened the yield curve. Essentially, the increased costs of our raw materials (deposits and borrowings) squeezes margin as this cost cannot be immediately passed on in our finished goods (loans and securities). Our liability-sensitive balance sheet and net interest margin is well modeled, under numerous stress scenarios, and we are comfortable that rising rates will transfer to increased revenue within an 18-month horizon, given a fairly normalized economic cycle.

We believe that the strategic build of our balance sheet over the past ten years to fully integrate commercial loans into a traditional residential portfolio, provides resilience and earnings reliance during the interest rate movements that accompany economic cycles.

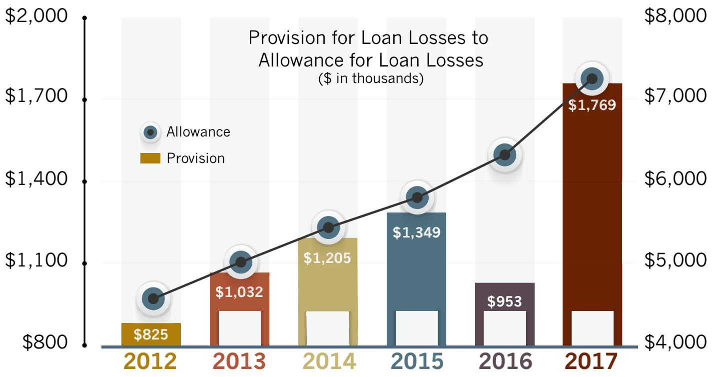
In 2017, however, increasing rates adversely impacted revenue as indicated below and more extensively in our Rate/Volume Analysis table on page 40 of the Management Discussion and Analysis in this report.

Rate/Volume Summarization 2017:

DEC. 2017 VS. DEC. 2016	VOLUME	RATE
($ in thousands)	Increase (Decrease) Due to	
Loans	$4,073	$(384)
Securities	698	841
Deposits	588	875
Borrowings	369	1,023
Net Change in Interest Income	$ 3,839	$ (1,005)

PROVISIONS FOR LOAN RISK

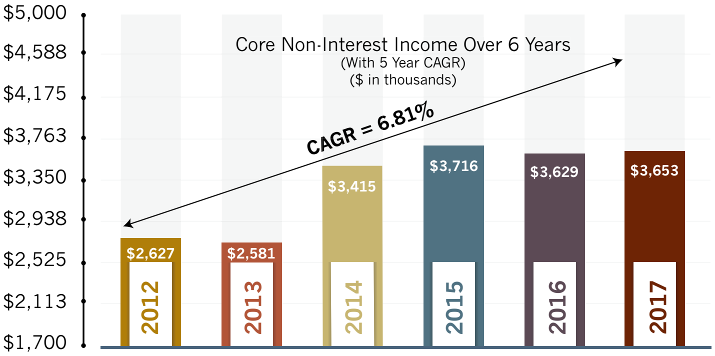
Additionally, our provisions for loan and leases is maintained in proportion to our strong loan growth, further impacting net income, yet central to our risk management discipline.



NON-INTEREST INCOME

Contributions from fees and other revenue sources have been muted. We lag in fee charges relative to competition and need to gain more value going forward from our services provided, particularly given thinner margins. We expect the second half of 2018 to normalize to the higher market rate fees on services provided, enhancing income without adverse impact on our customer centricity.

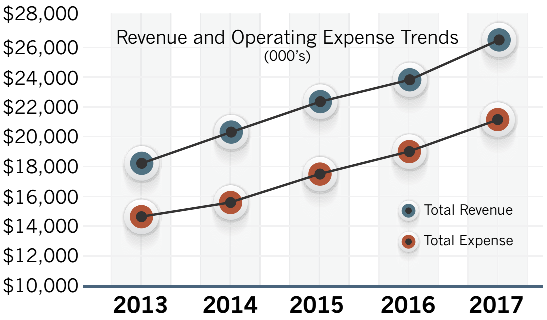
Investment and Insurance Services provide a rounded array of financial services for our customers and are self-sustaining, but have not achieved the scale or synergy necessary to positively impact net income.



OPERATING EXPENSE

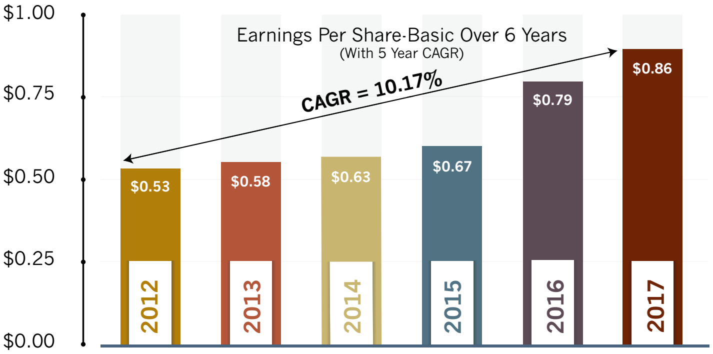
Expense has grown at an annual rate of 10.87% in 2017, and 9.40% annually over the last five years.

Revenue growth during the same periods has risen 11.94% and 8.89%, respectively.



The separation of rate of growth of operating expenses relative to revenue, is projected to move favorably as we build to scale. The build of our balance sheet and franchise as we move toward $1.0 billion in total assets requires our continued investment in people, technology, risk management, and infrastructure. Expectations of our constituents and regulatory oversight shift dramatically higher for banks over $1.0 billion. Our forecasted projections have us obtaining this significant milestone sometime around mid-year 2019. We are focused on preparing for these higher expectations with confidence and competence. Our expenses reflect a pre-build of capacity for this next evolution of our community bank.

While operating expense to total average assets for 2017 is at an historically low 2.58%, our efficiency ratio of 79.13%, clearly shows that we are not attaining a high enough level of revenue to contribute to earnings and capital. We believe the efficiency ratio reflects more on our need to grow revenue rather than a function of expense management. That stated, all elements are required to meet our projected benchmarks to contribute to return on shareholder investment and capital growth.



CAPITAL MANAGEMENT

The rate of growth in our balance sheet has exceeded the replenishment of capital through retained earnings as we leverage your capital contributions made in October 2014.

As we continue to expand franchise and meet the demands in our market, the potential need to access capital markets for additional contribution grows. We understand it is incumbent upon us to demonstrate growth in earnings per share to ensure forward confidence.

EPS has grown at an annual rate of 10.17% over the last five years. As our capacity build meets the forward expectations of operating at over $1 billion in total assets, and the interest rate cycle allows asset repricing at higher rates, we are confident that we will demonstrate our capabilities to provide the appropriate risk-managed return on investment.

FRANCHISE BUILD AND MARKET EXPANSION

During 2017, we opened a loan production office in Utica, NY. We see opportunities to meet market needs with our community banking model in the Mohawk Valley, a market well known to our senior management and Board of Directors.

However, our primary focus remains the greater Syracuse, NY market relative to expansion opportunity. We continue to become an increasingly vital banking resource in the Syracuse Market and a respected, engaged business in that community.

To further enhance our presence, the following actions have, or will be, taken in 2018.

- Calvin Corriders, a six-year member of our bank team, was named Regional President, Syracuse Market in January 2018. Calvin has been a highly respected member of the Syracuse community and a banker in that market for 30+ years. His active presence and enhanced authority on our behalf, as well as our aligned values and vision, further foster confidence in our bank in the Syracuse market.
- We have filed application and received approval to open a branch office on Route 31 in the Town of Clay. A strongly growing bedroom community between Oswego and Syracuse, we expect to begin operation in the 4th quarter of 2018. We are filing application to open a branch office in the Southwest neighborhood of Syracuse, with the support of community leadership. As this office will serve a market deemed underserved, we are applying for a Banking Development District designation under the New York Department of Financial Services program designed to encourage and support such districts. We look forward to fulfilling our responsibility and commitment to serve all those in the communities we operate.
- We are making significant technology investments in our delivery platforms to meet the growing sophistication of our customer base and the continued increased use of electronic delivery channels.

GOVERNANCE/MANAGEMENT

We believe that there is no such thing as a bad company with good governance or a good company with bad governance.

Our strength always begins with the quality of our independent Board of Directors. Our Board is fully engaged in our communities and the active oversight of our company.

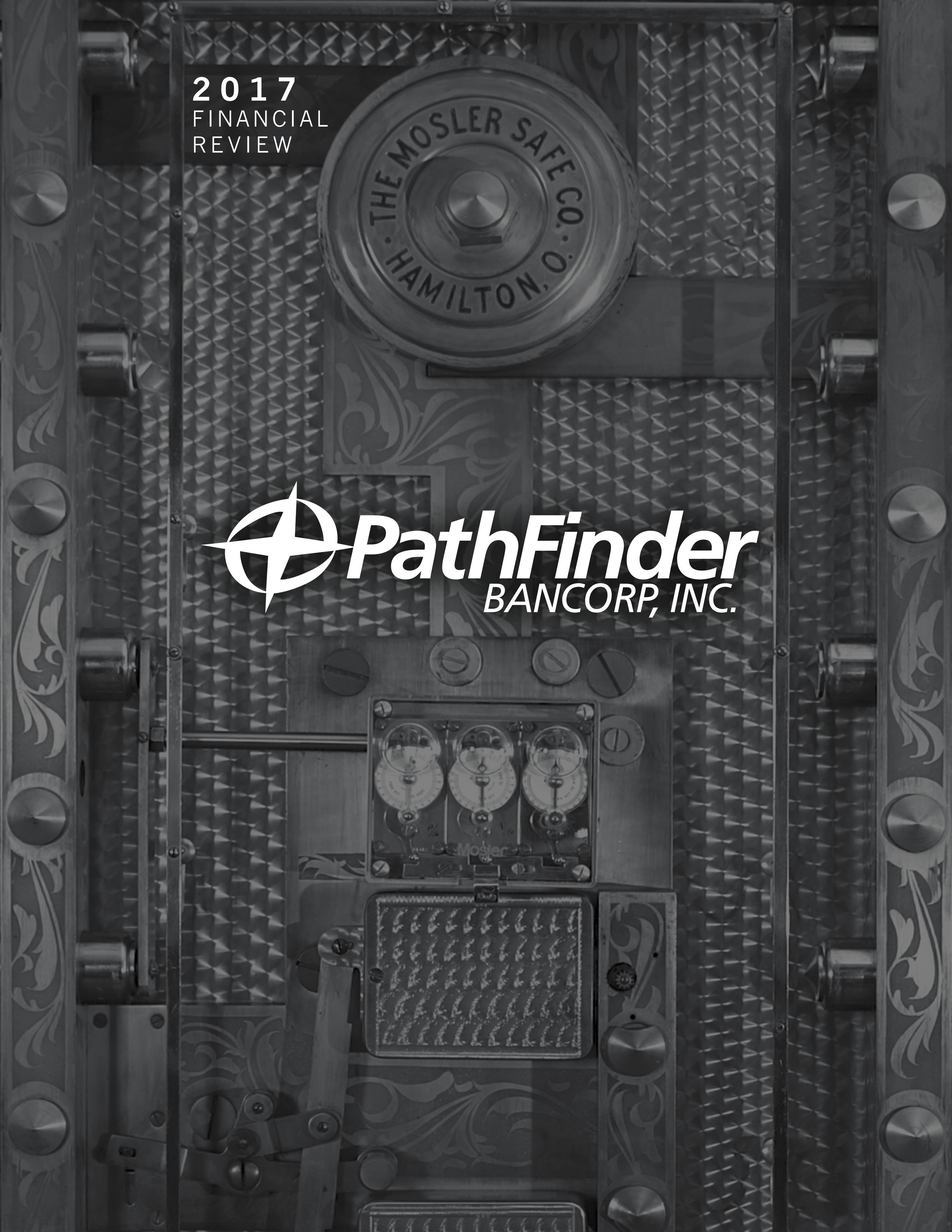
Our management team has demonstrated that we foster positive, mutually beneficial relationships with community and business partners, civic and non-profit leadership, and the respected members of our regulatory oversight bodies. We are focused on building a banking franchise of long-term value for our shareholders, our customers, our community, and our dedicated staff of bank professionals.

We are grateful for the support we receive and we are honored to be a part of the stewardship of this community bank serving our market for 159 years. We look forward to a mutually rewarding future to all of you who have contributed so much to allow us the privilege to serve, solve and build value in Central New York.

Chris R. Burritt
Chairman of the Board

Thomas W. Schneider
President and CEO

2017
FINANCIAL REVIEW



PathFinder
BANCORP, INC.

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

FORM 10-K

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

For the Fiscal Year Ended December 31, 2017

Commission File No. 001-36695

PATHFINDER BANCORP, INC.

(Exact name of registrant as specified in its charter)

Maryland	**38-3941859**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

214 West First Street
Oswego, NY 13126

(Address of principal executive offices) (Zip code)

Registrant's telephone number, including area code (315) 343-0057

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

Title of each class	**Name of each exchange on which registered**
Common Stock, $0.01 par value	**The NASDAQ Stock Market LLC**

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

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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of the registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. ☐

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

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☐ (Do not check if a smaller reporting company)	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 Act). Yes ☐ No ☒

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the Registrant, computed by reference to the last sale price on June 30, 2017, as reported by the NASDAQ Capital Market ($15.70), was approximately $66.9 million.

As of March 26, 2018, there were 4,292,586 shares outstanding of the Registrant's common stock.

DOCUMENTS INCORPORATED BY REFERENCE:

Proxy Statement for the 2018 Annual Meeting of Shareholders of the Registrant (Part III).

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FORM 10-K ANNUAL REPORT
FOR THE YEAR ENDED
DECEMBER 31, 2017
PATHFINDER BANCORP, INC.

PART I

FORWARD-LOOKING STATEMENTS

When used in this Annual Report the words or phrases “will likely result”, “are expected to”, “will continue”, “is anticipated”, “estimate”, ”project” or similar expressions are intended to identify “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Such statements are subject to certain risks and uncertainties. Actual results and financial condition may differ, possibly materially, from the anticipated results and financial condition indicated in these forward-looking statements. Important factors that could cause the Company’s actual results and financial condition to differ from those indicated in the forward-looking statements include, among others:

- Credit quality and the effect of credit quality on the adequacy of our allowance for loan losses;
- Deterioration in financial markets that may result in impairment charges relating to our securities portfolio;
- Competition in our primary market areas;
- Changes in interest rates and national or regional economic conditions;
- Changes in monetary and fiscal policies of the U.S. Government, including policies of the U.S. Treasury and the Federal Reserve Board;
- Significant government regulations, legislation and potential changes thereto;
- A reduction in our ability to generate or originate revenue-producing assets as a result of compliance with heightened capital standards;
- Increased cost of operations due to regulatory oversight, supervision and examination of banks and bank holding companies, and higher deposit insurance premiums;
- Cyberattacks, computer viruses and other technological threats that may breach the security of our websites or other systems;
- Technological changes that may be more difficult or expensive than expected;
- Limitations on our ability to expand consumer product and service offerings due to consumer protection laws and regulations; and
- Other risks described herein and in the other reports and statements we file with the SEC.

These risks and uncertainties should be considered in evaluating forward-looking statements and undue reliance should not be placed on such statements. Undue reliance should not be placed on any such forward-looking statements, which speak only as of the date made. The factors listed above could affect the Company’s financial performance and could cause the Company’s actual results for future periods to differ materially from any opinions or statements expressed with respect to future periods in any current statements. Additionally, all statements in this document, including forward-looking statements, speak only as of the date they are made, and the Company undertakes no obligation to update any statement in light of new information or future events.

ITEM 1: BUSINESS

GENERAL

Pathfinder Bancorp, Inc.

Pathfinder Bancorp, Inc. (the "Company") is a Maryland corporation headquartered in Oswego, New York. The primary business of the Company is its investment in Pathfinder Bank (the "Bank") which is 100% owned by the Company. Pathfinder Bank is a commercial bank chartered by the New York State Department of Financial Services (the “NYSDFS”). The Bank provides loans to, and gathers deposits from, customers primarily within Oswego and Onondaga Counties in Central New York State.

At December 31, 2017 and 2016, 4,280,227 and 4,236,744 shares of Company common stock were outstanding, respectively.

On October 15, 2015, the Company executed a $10.0 million non-amortizing subordinated loan agreement ("subordinated loan") with an unrelated third party that is scheduled to mature on October 1, 2025. The Company has the right to prepay the subordinated loan at any time after October 15, 2020 without penalty. The terms of the subordinated loan required interest payments at an annual interest rate of 3.50% from October 15, 2015 to February 29, 2016. The annual interest rate increased to 6.25% on March 1, 2016 through the maturity date. The subordinated loan is senior in the Company's credit repayment hierarchy only to the Company's common equity and, as a result, qualifies as Tier 2 capital for the Company for all future periods when applicable. The Company paid $172,000 in origination and legal fees as part of this transaction. These fees are amortized over the life of the subordinated loan through its first call date of October 1, 2020 using the effective interest method. The cost of funds related to this transaction is 6.44% calculated under this method.

The proceeds from the subordinated loan were used to repay preferred stock issued to the U.S. Treasury as part of the Small Business Lending Program ("SBLF"), which was retired on February 16, 2016. The issuance of the subordinated loan increases interest expense by $644,000 per year but prospectively reduces the amount payable to the SBLF in preferred stock dividends. Effective April 1, 2016, the annual dividend rate for the preferred stock would have been 9.0%. The retirement of the $13.0 million of the SBLF Preferred Series B stock, therefore, resulted in an annual reduction of preferred dividends payable of approximately $1.2 million. The Company paid $0 in preferred dividends in 2017 and $16,000 in 2016 through the date that the preferred stock was retired. These transactions had no effect on the regulatory capital position of the Bank.

On June 1, 2016, the Company announced that it had completed the process of its previously announced restructuring plan to combine the operations of its then-existent subsidiaries, Pathfinder Bank and Pathfinder Commercial Bank, into a single full service New York State chartered commercial bank. This transaction was completed on May 31, 2016.

At December 31, 2017, the Company had total consolidated assets of $881.3 million, total deposits of $723.6 million and shareholders' equity of $61.8 million plus a noncontrolling interest of $333,000, which represents the 49% not owned by the Company as a result of the 2013 acquisition of the FitzGibbons Agency, LLC.

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

Pathfinder Bank

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

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

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

The Bank owned Pathfinder REIT, Inc., a New York corporation, as a wholly-owned real estate investment trust subsidiary. Pathfinder REIT, Inc. ceased all operations in December 2017 and all of its assets and liabilities were transferred at that time to the Bank. The cessation of Pathfinder REIT, Inc.'s operations and the transfer of all assets and liabilities from Pathfinder REIT, Inc. to the Bank had no effect on the Company's consolidated financial position at December 31, 2017 or the results of its operations for the year ended December 31, 2017. The formal dissolution of Pathfinder REIT, Inc. as a legal entity will be completed in 2018.

The Bank also owns 100% of Whispering Oaks Development Corp. ("Whispering Oaks"), a New York corporation that is retained to operate or develop real estate-related projects. At December 31, 2017, Whispering Oaks operated a small tenant-occupied commercial building that houses an ATM facility for the Bank, and, through a wholly-owned second-tier subsidiary, is the sole limited partner in an unconsolidated special-purpose partnership. The partnership currently operates a low-income residential housing facility. The activities of Whispering Oaks resulted in a pre-tax loss of $44,000 in 2017.

Additionally, the Bank owns 100% of Pathfinder Risk Management Company, Inc., which was established to record the 51% controlling interest upon the December 2013 purchase of the FitzGibbons Agency, an Oswego County property, casualty and life insurance brokerage business with approximately $803,000 in annual revenues. The activities of Pathfinder Risk Management Company, Inc. resulted in pre-tax losses of $139,000 in 2017.

Employees

As of December 31, 2017, the Bank had 136 full-time employees and 8 part-time employees. The employees are not represented by a collective bargaining unit and we consider our relationship with our employees to be good.

MARKET AREA AND COMPETITION

Market Area

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

The economy in Oswego County is based primarily on manufacturing, energy production, heath care, education, and government. The broader Central New York market has a more diverse array of economic sectors, including, food processing production and transportation, in addition to financial services. The region has also developed particular strength in emerging industries such as bio-processing, medical devices and renewable energy.

Based on recent independent market survey reports, median home values were $131,900 in Onondaga County and $96,700 in Oswego County at the end of 2017. Home values have shown only modest increases in recent years within the Syracuse metro area, including Onondaga and Oswego Counties. This modest increase in home values within the area followed a period in which home values within the area exhibited relative stability compared to many other areas of the country during the most recent economic recession that began in 2008.

Competition

Pathfinder Bank encounters strong competition both in attracting deposits and in originating real estate and other loans. Our most direct competition for deposits and loans comes from commercial banks, savings institutions and credit unions in our market area, including money-center banks such as JPMorgan Chase & Co. and Bank of America, regional banks such as M&T Bank and Key Bank N. A., and community banks such as NBT Bank and Community Bank N.A., all of which have greater total assets than we do. We compete for deposits by offering depositors a high level of personal service, a wide range of competitively priced financial services, and a well distributed network of branches, ATMs, and electronic banking. We compete for loans through our competitive pricing, our experienced and active loan officers, local knowledge of our market and local decision making, strong community support and involvement, and a highly reputable brand. As the economy has improved, and loan demand has increased, competition from financial institutions for commercial and residential loans has also increased. Additionally, some of our competitors offer products and services that we do not offer, such as trust services and private banking. Our primary focus is to build and develop profitable consumer and commercial customer relationships while maintaining our role as a community bank.

As of June 30, 2017, based on the most recently-available FDIC data, we had the largest market share in Oswego County, representing 42.2% of all deposits, and we additionally held 1.2% of all deposits in Onondaga County. In addition, when combining both Oswego and Onondaga Counties, we have the sixth largest market share of sixteen institutions, representing 5.4% of the total market.

LENDING ACTIVITIES

General

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

Commercial Real Estate Loans

Over the past several years, we have focused on originating commercial real estate loans, and we believe that commercial real estate loans will continue to provide growth opportunities for us. We expect to increase, subject to our underwriting standards and market conditions, this business line in the future with a target loan size of $500,000 to $1.0 million to small businesses and real estate projects in our market area. Commercial real estate loans are secured by properties such as multi-family residential, office, retail, warehouse and owner-occupied commercial properties.

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

A commercial real estate borrower's financial condition is monitored on an ongoing basis by requiring periodic financial statement updates, payment history reviews, property inspections and periodic face-to-face meetings with the borrower. We generally require borrowers with aggregate outstanding balances exceeding $100,000 to provide annual updated financial statements and federal tax returns. These requirements also apply to all guarantors on these loans. We also require borrowers to provide an annual report of income and expenses for the property, including a rent-roll, as applicable.

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

Commercial Loans

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

Commercial term loans are typically secured by equipment, furniture and fixtures, inventory, accounts receivable or other business assets, or, in some circumstances, such loans may be unsecured. From time to time, we also originate commercial loans through Small Business Administration (“SBA”) and United States Department of Agriculture (“USDA”) guaranteed loan programs. Over the past several years, we have focused on increasing our commercial lending and our business strategy is to continue to increase our originations of commercial loans to small businesses in our market area, subject to our underwriting standards and market conditions. Our commercial loans are generally comprised of adjustable-rate loans, indexed to the prime rate, with terms consisting of three to seven years, depending on the needs of the borrower and the useful life of the underlying collateral. We make commercial loans to businesses operating in our market area for purchasing equipment, property improvements, business expansion or working capital. If a commercial loan is secured by equipment, the maturity of a term loan will depend on the useful life of the equipment purchased, the source of repayment for the loan and the purpose of the loan. We generally obtain personal guarantees on our commercial loans.

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

Residential Real Estate Loans

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

We currently offer one-to-four family residential real estate loans with terms up to 30 years that are generally underwritten according to Federal National Mortgage Association (“Fannie Mae”) guidelines, and we refer to loans that conform to such guidelines as “conforming loans.” We generally originate both fixed-rate and adjustable-rate mortgage loans in amounts up to the maximum conforming loan limits as established by the Federal Housing Finance Agency, which as of December 31, 2017, was generally $424,100 for single-family homes in our market area.

Although conforming loans are saleable, we generally hold our one-to-four family residential real estate loans in our portfolio but have the capability to sell the mortgages into the secondary market, at management’s discretion, as a source of liquidity or as a means of managing interest-rate risk. Such loan sales were conducted on a limited basis in 2017 and 2016. A significant portion of our loan portfolio consists of fixed-rate one-to-four family residential real estate loans with terms in excess of 15 years. We also originate one-to-four family residential real estate loans secured by non-owner occupied properties. However, we generally do not make loans in excess of 80% loan-to-value on non-owner occupied properties.

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

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

For borrowers who do not obtain private mortgage insurance (“PMI”), our lending policies limit the maximum loan-to-value ratio on both fixed-rate and adjustable-rate mortgage loans to 80% of the appraised value of the collateralized property, with the exception of a limited use product which allows for loans up to 90% with no PMI. For most one-to-four family residential real estate loans with loan-to-value ratios of between 80% and 95%, we require the borrower to obtain private mortgage insurance. For first mortgage loan products, we require the borrower to obtain title insurance. We also require homeowners’ insurance, fire and casualty, and, if necessary, flood insurance on properties securing real estate loans. We do not, and have never offered or invested in, one-to-four family residential real estate loans specifically designed for borrowers with sub-prime credit scores, including interest-only, negative amortization or payment option adjustable-rate mortgage loans.

Residential Construction Loans

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

Tax-exempt Loans

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

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

Home Equity Loans and Junior Liens

Home equity loans and junior liens are made up of lines of credit secured by owner-occupied and non-owner occupied one-to-four family residences and second and third real estate mortgage loans. Home equity loans and home equity lines of credit are generally underwritten using the same criteria that we use to underwrite one-to-four family residential mortgage loans. We typically originate home equity loans and home equity lines of credit on the basis of the applicant's credit history, an assessment of the applicant's ability to meet existing obligations and payments on the proposed loan, and the value of the collateral securing the loan. Home equity loans are offered with fixed interest rates. Lines of credit are offered with adjustable rates, which are indexed to the prime rate, and with a draw period of up to 10 years and a payback period of up to 20 years. The loan-to-value ratio for our home equity loans is generally limited to 80% when combined with the first security lien, if applicable. The loan to value of our home equity lines of credit is generally limited to 80%, unless the Bank holds the first mortgage. If we hold the first mortgage, we will permit a loan to value of up to 90%, and we adjust the interest rate and underwriting standards to compensate for the additional risk.

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

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

Consumer Loans

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

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

The Company will invest from time to time in pools of collateralized consumer loans originated and serviced by financial institutions operating outside of the Company's primary market area. Loan pools will, in some instances, have economic advantages in terms of yield and/or other portfolio characteristics, such as interest rate risk sensitivity, superior to investment securities and are used to increase the performance characteristics of the Company's earning-asset portfolios viewed as a whole. Typically, the Company will acquire a participating interest from the originating institution in an amount that is less than 100% of the outstanding principal balance of the entire pool and the originating institution will retain a residual principal interest in the portion of the loans not acquired by the Company. Loans acquired through these transactions are required by the Company's internal policies to be underwritten to standards that are consistent with those of the Company's own underwriting guidelines and internal practices. Pre-purchase due diligence is performed that includes a thorough review of the originating institution's regulatory compliance procedures, underwriting practices and individual loan documentation. Since these pools are subject to borrower credit default and are collateralized by out-of-market assets, the Company relies on the best efforts of the originating institution, acting as the loans' servicer, to collect on the loans within the pool and to mitigate losses due to such defaults. Such mitigation efforts include the orderly and timely liquidation of loan collateral, as necessary. Accordingly, such loan pools have both the credit risk typically associated with consumer loans and servicer risk components that are carefully monitored by the Company on an ongoing basis.

Loan Originations, Purchases, Sales and Servicing

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

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

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

Loan Approval Procedures and Authority

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

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

If a loan is in excess of any individual loan officer's lending authority, the extension of credit must be referred to the Officer Loan Committee ("OLC"). The OLC is comprised of the President (serving as chairman), the Executive Vice President and Chief Credit Officer (serving as chair in the absence of the President), the Senior Vice President and General Counsel, as well as other members of the management team and retail and commercial lenders as may be appointed by the President. The OLC has authority to approve all commercial loans, and one-to-four family residential real estate loans where the total related credit is $1 million or less which are not within the lenders' individual authority. In addition, the OLC may approve all municipal loans, where the total related credit is $2.5 million or less, and the individual loan amount is $2.5 million or less for rated municipal loans, and $1.5 million for unrated credits. The OLC has the authority to approve all consumer loans where the total related credit is $2.5 million or less and the individual loan amount is $200,000 for unsecured loans or $750,000 for secured loans. The Executive Loan Committee, which consists of members of the Bank's board of directors, must approve all extensions of credit in excess of the limits for the OLC and lenders individual authority.

Loans to One Borrower

Under New York law, New York commercial banks are subject to loans-to-one borrower limits, which are substantially similar as those applicable to national banks, which restrict loans to one borrower to an amount equal to 15% of unimpaired capital and unimpaired surplus, which was $11.7 million at December 31, 2017, on an unsecured basis, and an additional amount equal to 10% of unimpaired capital and unimpaired surplus, which was $7.7 million at December 31, 2017, if the loan is secured by readily marketable collateral (generally, financial instruments and bullion, but not real estate), subject to exceptions.

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

ASSET QUALITY

Loan Delinquencies and Collection Procedures

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

Impaired Loans, Non-performing Loans and Troubled Debt Restructurings

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

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

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

Residential and Consumer Loans:

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

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

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

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

Troubled Debt Restructurings (“TDR”)

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

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

Foreclosed real estate

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

Loan delinquencies together with properties within our Foreclosed Real Estate portfolio are reviewed monthly by the board of directors.

Classified Assets

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

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

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

We also employ a risk grading system for our loans to help assure that we are not taking unnecessary and/or unmanageable risk. The primary objective of the loan risk grading system is to establish a method of assessing credit risk to further enable management to measure loan portfolio quality and the adequacy of the allowance for loan losses. Further, we contract with an external loan review firm to complete a credit risk assessment of the loan portfolio on a regular basis to help determine the current level and direction of our credit risk. The external loan review firm communicates the results of their findings to the Executive Loan Committee in writing and by periodically attending the Executive Loan Committee meetings. Any material issues discovered in an external loan review are also communicated immediately to the President of the Bank. See Note 5 to the consolidated financial statements for further details on the Company's credit quality indicators that define our risk grading system.

Allowance for Loan Losses

The allowance for loan losses represents management's estimate of losses inherent in the loan portfolio as of the date of the statement of condition and it is recorded as a reduction of loans. The allowance for loan losses is maintained at a level considered adequate to provide for losses that can be reasonably anticipated. Management performs a quarterly evaluation of the adequacy of the allowance. The allowance is increased by the provision for loan losses, and decreased by charge-offs, net of recoveries. Loans deemed to be uncollectible are charged against the allowance for loan losses, and subsequent recoveries, if any, are credited to the allowance. All or part of the principal balance of loans receivable are charged off to the allowance as soon as it is determined that the repayment of all or part of the principal balance is highly unlikely. Non-residential consumer loans are generally charged off no later than 120 days past due on a contractual basis, unless productive collection efforts are providing results. Consumer loans may be charged off earlier in the event of bankruptcy, or if there is an amount that is deemed uncollectible. No portion of the allowance for loan losses is restricted to any individual loan type and the entire allowance is available to absorb any and all loan losses.

The allowance is based on three major components which are: (i) specific components for impaired loans, (ii) recent historical losses and several qualitative factors applied to a general pool of loans, and (iii) an unallocated component.

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

The second component is the general allowance which covers pools of loans, by loan class, not considered impaired, smaller balance homogenous loans, such as residential real estate, home equity and other consumer loans. These pools of loans are evaluated for loss exposure based on historical loss rates for each of these categories of loans. The ratio of net charge-offs to loans outstanding within each loan class over the most recent eight quarters, lagged by one quarter, is used to generate the historical loss rates. In addition, qualitative factors are added to the historical loss rates in arriving at the total allowance for loan losses needed for this general pool of loans. The qualitative factors include changes in national and local economic trends, the rate of growth in the portfolio, trends of delinquencies and nonaccrual balances, changes in loan policy, and changes in lending management experience and related staffing. Each factor is assigned a value to reflect improving, stable or declining conditions based on management's best judgment using relevant information available at the time of the evaluation.

These qualitative factors, applied to each product class, make the evaluation inherently subjective, as it requires material estimates that may be susceptible to significant revision as more information becomes available.

The third component may consist of an unallocated allowance which is maintained to cover uncertainties that could affect management's estimate of probable losses. The unallocated component of the allowance, when present, reflects an additional margin for potential imprecision inherent in the underlying assumptions used in the methodologies for estimating specific and general losses in the portfolio. This component would typically be appropriate in times of significant economic dislocations or uncertainties in either, or both, the local and national economies. The unallocated allowance generally comprises less than 10% of the total allowance for loan losses and can be as little as 0% of total allowance as was the case in at December 31, 2017 and December 31, 2016.

When a loan is determined to be impaired, we will reevaluate the collateral which secures the loan. For real estate loans, we will obtain a new appraisal or broker's opinion, whichever is considered to provide the most accurate value in the event of sale. An evaluation of equipment held as collateral will be obtained from an independent firm able to provide such an evaluation. Collateral will be inspected not less than annually for all impaired loans and will be reevaluated not less than every two years. Appraised values are discounted to arrive at the estimated selling price of the collateral, which is considered to be the estimated fair value. The discounts also include estimated costs to sell the property. For commercial and industrial loans secured by non-real estate collateral, such as accounts receivable, inventory and equipment, estimated fair values are determined based on the borrower's financial statements, inventory reports, accounts receivable agings or equipment appraisals or invoices. Indications of value from these sources are generally discounted based on the age of the financial information or the quality of the assets.

Large groups of homogeneous loans are evaluated for impairment in the aggregate. Accordingly, we do not separately identify individual residential mortgage loans with outstanding principal balances less than $300,000, home equity and other consumer loans for impairment disclosures. We make exceptions to this general rule when such loans are (1) rated substandard or worse, on nonaccrual status and are related to borrowers with total related credit exposure in excess of our threshold balance of $300,000; or (2) the loans are subject to a troubled debt restructuring agreement.

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

INVESTMENT AND HEDGING ACTIVITIES

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

All investment securities must meet regulatory guidelines and be permissible bank investments. Our investment securities include United States Government obligations, securities of various federal agencies and of state and municipal governments, deposits at the FHLBNY, certificates of deposit at federally insured institutions, and federal funds. Within certain regulatory limits, we may also invest a portion of our assets in mutual funds, equity securities and investment grade corporate debt securities. As part of our membership in the FHLBNY, we are required to maintain a dividend-earning investment in FHLBNY stock.

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

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

The general objectives of the investment portfolio are to assist in the overall interest rate risk management of Pathfinder Bank, generate a reasonable rate of return consistent with the safety of principal, provide a source of liquidity, minimize our tax liability, and mitigate our interest rate and credit risk. We purchase securities to provide necessary liquidity for day-to-day operations and when investable funds exceed loan demand. The effect that the proposed security would have on our credit and interest rate risk and risk-based equity is also considered.

Securities classified as held-to-maturity, other than mortgage-backed securities and collateralized mortgage obligations, consist primarily of state and political subdivision securities, and to a lesser extent, federal agency obligations and corporate securities. Our securities classified as available-for-sale consist primarily of corporate securities and federal agency obligations, which include Federal Farm Credit Bank notes, FHLBNY notes, Fannie Mae notes and Federal Home Loan Mortgage Corporation (“Freddie Mac”) notes. For a discussion on mortgage backed securities, see “Mortgage-Backed Securities and Collateralized Mortgage Obligations.”

We also have an investment in FHLBNY stock which is classified separately from securities due to the restrictions on sale or transfer. For further information regarding our securities portfolio, see Note 4 to the consolidated financial statements.

On five occasions during 2017, the Company sold, and subsequently repurchased, U.S. Treasury securities in the approximate amount of $40.0 million for each transaction. These transactions were intended to act as hedges against rising short-term interest rates. The Company was in controlling possession of, but did not own, the securities at the time of each sale. On each occasion, the Treasury securities had been received by the Company, under industry-standard repurchase agreements, from an unrelated third party as collateral for a 30-day loan of approximately $40.0 million which was made at market interest rates to that third party. The security sale on each occasion provided the funds necessary to advance the loan to the third party and placed the Company in what is generally described as a “short position” with respect to the sold U.S. Treasury security. These transactions acted as a hedge against rising short-term interest rates because the price of each sold security would be expected to decline in a rising short-term interest rate environment and could therefore be re-acquired at the conclusion of each 30-day loan period at a price lower than the price at which the securities were originally sold. Generally, short-term rates rose over the combined duration of these transactions and, consequently, the Company recognized aggregate gains on the sale and repurchase of the securities of $428,000 in 2017. The transactions’ gains were characterized as capital gains for tax purposes. These capital gains utilized existing, previously reserved-for, capital loss tax carryforwards that were established in 2013. The Company recognized tax benefits related to these transactions of $150,000 in 2017. The tax benefits arose from the reversal of reserves established in 2013 against the portion of the Company’s deferred tax assets related to existing capital loss carryforward tax positions. The reserves were originally established due to the uncertainty at that time related to the Company’s ability to generate future capital gain income within the five-year statutory life of the capital loss carryforward position under the Internal Revenue Code. The recognized tax benefit from the reversal of those reserves reduced the Company’s effective tax rate from what would have been 24.0% to 20.6 % in 2017 without regard to the effects of the one-time charge related to the enactment on December 22, 2017 of the Tax Cuts and Jobs Act of 2017 (the “Tax Act”).

The capital gain income and the additional recognized tax benefits derived from these transactions were partially offset by an additional $368,000 in after-tax interest expense on borrowings from additional pre-tax interest expense on those borrowings of $598,000 that reduced pretax net interest margin by that amount in 2017. In total, after-tax net income increased by $178,000 for the twelve months ended December 31, 2017 as a result of these hedging transactions.

On one occasion during 2016, the Company sold, and subsequently repurchased, a U.S. Treasury security in the approximate amount of $25.0 million. This transaction was intended to act as a hedge against rising short-term interest rates. The security was received by the Company, under an industry-standard repurchase agreement, from an unrelated third party as collateral for a 30-day loan of approximately $25.0 million, which was made at zero interest to that third party. Short-term interest rates rose over the duration of this transaction and, consequently, the Company recognized a gain on the sale and repurchase of the security of $85,000 and a related tax benefit of $34,000 in 2016. The recognized tax benefit reduced the Company's effective tax rate from what would have been 26.3% to 25.5% in 2016.

The capital gain income and the additional recognized tax benefits derived from these 2016 transactions were partially offset by an additional $54,000 in after-tax interest expense on borrowings derived from additional pre-tax interest expense on those borrowings of $88,000 that reduced pretax net interest margin by that amount in 2016. In total, after-tax net income increased by $65,000 for the twelve months ended December 31, 2016 as a result of this hedging transaction.

MORTGAGE-BACKED SECURITIES AND COLLATERALIZED MORTGAGE OBLIGATIONS

We purchase mortgage-backed securities and collateralized mortgage obligations guaranteed by Fannie Mae, Freddie Mac and the Government National Mortgage Association ("Ginnie Mae"). In recent years, the Company has also increase the level of its investments in mortgage-backed securities and collateralized mortgage obligations issued by private entities. These securities are generally senior tranches of larger issuances that provide substantial credit enhancements and therefore reasonable, but not absolute, protection for the Company from the risks of default. We invest in mortgage-backed securities and collateralized mortgage obligations to achieve positive interest rate spreads with minimal administrative expense, and to lower our credit risk through geographic diversification. These securities are generally relatively short in duration and therefore reduce the Bank's sensitivity to changes in interest rates. All asset-backed securities held by the Bank at December 31, 2017 were either rated at or above the lowest investment grade for credit quality by a nationally-recognized statistical rating organization (a "NRSRO") or were the most senior tranches of securitizations hat were not rated by a NRSRO at the time of the securities' issuance. We regularly monitor the credit quality of this portfolio. At December 31, 2017, no securities held by the Bank in this category had been downgraded by a NRSRO.

Mortgage-backed securities and collateralized mortgage obligations are created by pooling mortgages and issuing a security with an interest rate which is less than the interest rate on the underlying mortgages. These securities typically represent a participation interest in a pool of single-family or multi-family mortgages, although we focus our investments on mortgage related securities backed by one-to-four family real estate loans. The issuers of such securities pool and resell the participation interests in the form of securities to investors such as the Bank, and in the case of government agency sponsored issues, guarantee the payment of principal and interest to investors. Mortgage-backed securities and collateralized mortgage obligations generally yield less than the loans that underlie such securities because of the cost of payment guarantees, if any, and credit enhancements. These fixed-rate securities are usually more liquid than individual mortgage loans.

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

ASSET-BACKED SECURITIES

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

The securities of the type the Bank typically invests in are typically collateralized by consumer loans or trade receivables and are generally senior tranches of larger issuances. These tranches provide substantial credit enhancements and therefore reasonable, but not absolute, protection for the Company from the risks of default. We invest in asset-backed securities to achieve positive interest rate spreads with minimal administrative expense, and to lower our credit risk through geographical and asset-type diversification. These securities are generally relatively short in duration and therefore reduce the Bank's sensitivity to changes in interest rates. All asset-backed securities held by the Bank at December 31, 2017 were either rated at or above the lowest investment grade for credit quality by a NRSRO or were the most senior tranches of securitizations that were not rated by a NRSRO at the time of the securities' issuance. We regularly monitor the credit quality of this portfolio. At December 31, 2017, no securities held by the Bank in this category had been downgraded by a NRSRO.

SOURCES OF FUNDS

General

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

Deposits

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

The CDARS is a form of a brokered deposit program in which we have been a participant since 2009. In addition to offering depositors enhanced FDIC insurance coverage, being a participant in CDARS allows us to fund our balance sheet through the CDARS' One-Way Buy program. This program uses a competitive bid process for available deposits, up to $50 million, at specified terms. These deposits work well for us because of their weekly availability, coupled with their short term duration, which allows us to more closely mirror our funding needs. We believe this arrangement is a viable source of funding provided that we maintain our "well-capitalized" status. See Note 11 to the consolidated financial statements for further details on our brokered deposits.

Borrowings

The Bank has a number of existing credit facilities available to it. At December 31, 2017, the Bank had existing lines of credit at FHLBNY, the Federal Reserve Bank ("FRB"), and three other correspondent banks. We obtain advances primarily from the FHLBNY utilizing the security of the common stock we own in the FHLBNY and qualifying residential mortgage loans as collateral, provided certain standards related to creditworthiness are met. These advances are made pursuant to several credit programs, each of which has its own interest rate and range of maturities. FHLBNY advances are generally available to meet seasonal and other withdrawals of deposit accounts and to permit increased lending.

In addition to the above borrowing capability, on October 15, 2015, the Company executed the $10.0 million non-amortizing Subordinated Loan with an unrelated third party that is scheduled to mature on October 1, 2025. The Company has the right to prepay the Subordinated Loan at any time after October 15, 2020 without penalty. The Subordinated Loan is senior in the Company's credit repayment hierarchy only to the Company's common equity and, as a result, qualifies as Tier 2 capital for the Company for all future periods when applicable. The cost of funds related to this transaction is 6.44% calculated under the effective interest method.

SUPERVISION AND REGULATION

General

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

The regulatory and supervisory structure establishes a comprehensive framework of activities in which an institution can engage and is intended primarily for the protection of depositors and the deposit insurance funds, rather than for the protection of shareholders and creditors. The regulatory structure also gives the regulatory authorities extensive discretion in connection with their supervisory and enforcement activities and examination policies, including policies concerning the establishment of deposit insurance assessment fees, classification of assets and establishment of adequate loan loss reserves for regulatory purposes. Any change in such regulatory requirements and policies, whether by the New York State legislature, the NYSDFS, the FDIC, the Federal Reserve Board or the United States Congress, could have a material adverse impact on the financial condition and results of operations of the Company and Pathfinder Bank. As is further described below, the Dodd-Frank Act has significantly changed the bank regulatory structure and may affect the lending, investment and general operating activities of depository institutions and their holding companies.

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

The Dodd-Frank Act

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

The Dodd-Frank Act broadened the base for FDIC assessments for deposit insurance and permanently increased the maximum amount of deposit insurance to $250,000 per depositor. The Dodd-Frank Act also, among other things, required originators of certain securitized loans to retain a portion of the credit risk, stipulated regulatory rate-setting for certain debit card interchange fees, repealed restrictions on the payment of interest on commercial demand deposits and contained a number of reforms related to mortgage originations. The Dodd-Frank Act increased the ability of shareholders to influence boards of directors by requiring companies to give shareholders a non-binding vote on executive compensation and so-called "golden parachute" payments. The Dodd-Frank Act also directed the Federal Reserve Board to promulgate rules prohibiting excessive compensation paid to company executives, regardless of whether the company is publicly traded or not.

The Dodd-Frank Act has increased the regulatory burden, compliance costs and interest expense for Pathfinder Bank and the Company.

New York Bank Regulation

Pathfinder Bank derives its lending, investment, branching and other authority primarily from the applicable provisions of New York State Banking Law and the regulations of the NYSDFS, as limited by federal laws and regulations. Under these laws and regulations, commercial banks, including Pathfinder Bank, may invest in real estate mortgages, consumer and commercial loans, certain types of debt securities, including certain corporate debt securities and obligations of federal, state and local governments and agencies, certain types of corporate equity securities and certain other assets. Under the statutory authority for investing in equity securities, a bank may invest up to 2% of its assets or 20% of its capital, whichever is less in exchange-registered corporate stock. Investment in the stock of a single corporation is limited to the lesser of 1% of the bank's assets or

15% of the Bank's capital. The Bank's authority to invest in equity securities is constrained by federal law, as explained later. Such equity securities must meet certain earnings ratios and other tests of financial performance. A bank may also exercise trust powers upon approval of the NYSDFS. Pathfinder Bank does not presently have trust powers.

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

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

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

New York State Community Reinvestment Regulation

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

Federal Regulations

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

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

In addition to establishing the minimum regulatory capital requirements, the regulations limit capital distributions and certain discretionary bonus payments to management if the institution does not hold a “capital conservation buffer” consisting of 2.5% of common equity Tier 1 capital to risk-weighted asset above the amount necessary to meet its minimum risk-based capital requirements. The capital conservation buffer requirement began being phased in beginning January 1, 2016 at 0.625% of risk-weighted assets and increasing each year until fully implemented at 2.5% on January 1, 2019. The buffer requirement rose to 1.875% on January 1, 2018.

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

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

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

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

The regulations were amended to incorporate the previously mentioned increased regulatory capital standards that were effective January 1, 2015. Under the amended regulations, an institution is deemed to be “well capitalized” if it has a total risk-based capital ratio of 10.0% or greater, a Tier 1 risk-based capital ratio of 8.0% or greater, a leverage ratio of 5.0% or greater and a common equity Tier 1 ratio of 6.5% or greater. An institution is “adequately capitalized” if it has a total risk-based capital ratio of 8.0% or greater, a Tier 1 risk-based capital ratio of 6.0% or greater, a leverage ratio of 4.0% or greater and a common equity Tier 1 ratio of 4.5% or greater. An institution is “undercapitalized” if it has a total risk-based capital ratio of less than 8.0%, a Tier 1 risk-based capital ratio of less than 6.0%, a leverage ratio of less than 4.0% or a common equity Tier 1 ratio of less than 4.5%. An institution is deemed to be “significantly undercapitalized” if it has a total risk-based capital ratio of less than 6.0%, a Tier 1 risk-based capital ratio of less than 4.0%, a leverage ratio of less than 3.0% or a common equity Tier 1 ratio of less than 3.0%. An institution is considered to be “critically undercapitalized” if it has a ratio of tangible equity (as defined in the regulations) to total assets that is equal to or less than 2.0%.

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

At December 31, 2017, Pathfinder Bank was well-capitalized.

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

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

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

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

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

Enforcement. The FDIC has extensive enforcement authority over insured state banks, including Pathfinder Bank. That enforcement authority includes, among other things, the ability to assess civil money penalties, issue cease and desist orders and remove directors and officers. In general, enforcement actions may be initiated in response to violations of laws and regulations and unsafe or unsound practices. The FDIC also has authority under federal law to appoint a conservator or receiver for an insured bank under certain circumstances. The FDIC is required, with certain exceptions, to appoint a receiver or conservator for an insured state non-member bank if the bank was "critically undercapitalized" on average during the calendar quarter beginning 270 days after the date on which the institution became "critically undercapitalized."

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

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

The Dodd-Frank Act required the FDIC to revise its procedures to base assessments upon each insured institution's total assets less tangible equity instead of deposits. The FDIC finalized a rule, effective April 1, 2011, that set the assessment range at 2.5 to 45 basis points of total assets less tangible equity. In conjunction with the Deposit Insurance Fund's reserve ratio achieving 1.15%, the assessment range (inclusive of possible adjustments) was reduced for insured institutions of less than $10 billion of total assets to 1.5 basis points to 30 basis points, effective July 1, 2016.

The Dodd-Frank Act increased the minimum target Deposit Insurance Fund ratio from 1.15% of estimated insured deposits to 1.35% of estimated insured deposits. The Federal Deposit Insurance Corporation must seek to achieve the 1.35% ratio by September 30, 2020. The Dodd-Frank Act requires insured institutions with assets of $10 billion or more to fund the increase from 1.15% to 1.35% and, effective July 1, 2016, such institutions are subject to a surcharge to achieve that goal. The Dodd-Frank Act eliminated the 1.5% maximum fund ratio, instead leaving it to the discretion of the Federal Deposit Insurance Corporation, and the Federal Deposit Insurance Corporation has exercised that discretion by establishing a long-range fund ratio of 2%.

In addition to the FDIC assessments, the United States government-sponsored enterprise known as the Financing Corporation ("FICO") is authorized to impose and collect, with the approval of the FDIC, assessments for anticipated payments, issuance costs and custodial fees on bonds issued by the FICO in the 1980s to recapitalize the former Federal Savings and Loan Insurance Corporation. The bonds issued by the FICO are due to fully mature in 2019. The FICO assessment rate is adjusted quarterly to reflect changes in the assessment base as determined from quarterly Call Report submissions. For the quarter ended December 31, 2017, the annualized Financing Corporation assessment was equal to 0.54 of a basis point of total assets less tangible capital.

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

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

Community Reinvestment Act. Under the CRA, a bank has a continuing and affirmative obligation, consistent with its safe and sound operation, to help meet the credit needs of its entire community, including low and moderate income neighborhoods. The CRA does not establish specific lending requirements or programs for financial institutions nor does it limit an institution's discretion to develop the types of products and services that it believes are best suited to its particular community. The CRA does require the FDIC, in connection with its examination of a bank, to assess the institution's record of meeting the credit needs of its community and to take such record into account in its evaluation of certain applications by such institution, including applications to establish or acquire branches and merger with other depository institutions. The CRA requires the FDIC to provide a written evaluation of an institution's CRA performance utilizing a four-tiered descriptive rating system. Pathfinder Bank's latest FDIC CRA rating, dated March 11, 2016, was "satisfactory."

Federal Reserve System. The Federal Reserve Board regulations require depository institutions to maintain non-interest-earning reserves against their transaction accounts (primarily negotiable order of withdrawal (NOW) and regular checking accounts). The regulations generally provide that reserves be maintained against aggregate transaction accounts as follows: a 3% reserve ratio is assessed on net transaction accounts up to and including $122.3 million; a 10% reserve ratio is applied above $122.3 million. The first $16.0 million of otherwise reservable balances are exempted from the reserve requirements. The amounts are adjusted annually. Pathfinder Bank complies with the foregoing requirements.

Federal Home Loan Bank System. Pathfinder Bank is a member of the Federal Home Loan Bank System, which consists of twelve regional Federal Home Loan Banks. The Federal Home Loan Bank System provides a central credit facility primarily for member institutions as well as other entities involved in home mortgage lending. As a member of the FHLBNY, Pathfinder Bank is required to acquire and hold a specified amount of shares of capital stock in the FHLBNY. As of December 31, 2017, Pathfinder Bank was in compliance with this requirement.

Other Regulations

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

- Truth-In-Lending Act, governing disclosures of credit terms to consumer borrowers;
- Real Estate Settlement Procedures Act, requiring that borrowers for mortgage loans for one-to-four family residential real estate receive various disclosures, including good faith estimates of settlement costs, lender servicing and escrow account practices, and prohibiting certain practices that increase the cost of settlement services;
- The TILA-RESPA Integrated Disclosure Rule, commonly known as the TRID rule, which became effective on October 3, 2015. This rule amended the Truth in Lending Act and the Real Estate Settlement Procedures Act to integrate several consumer disclosures for mortgage loans;

- Home Mortgage Disclosure Act, requiring financial institutions to provide information to enable the public and public officials to determine whether a financial institution is fulfilling its obligation to help meet the housing needs of the community it serves;
- Equal Credit Opportunity Act, prohibiting discrimination on the basis of race, creed or other prohibited factors in extending credit;
- Fair Credit Reporting Act, governing the use and provision of information to credit reporting agencies;
- Fair Debt Collection Act, governing the manner in which consumer debts may be collected by collection agencies;
- Truth in Savings Act; and
- Rules and regulations of the various federal agencies charged with the responsibility of implementing such federal laws;
- Right to Financial Privacy Act, which imposes a duty to maintain confidentiality of consumer financial records and prescribes procedures for complying with administrative subpoenas of financial records;
- Electronic Funds Transfer Act and Regulation E promulgated thereunder, which govern automatic deposits to and withdrawals from deposit accounts and customers' rights and liabilities arising from the use of automated teller machines and other electronic banking services;
- Check Clearing for the 21st Century Act (also known as "Check 21"), which gives "substitute checks," such as digital check images and copies made from that image, the same legal standing as the original paper check;
- USA PATRIOT Act, which requires banks operating to, among other things, establish broadened anti-money laundering compliance programs, due diligence policies and controls to ensure the detection and reporting of money laundering. Such required compliance programs are intended to supplement existing compliance requirements, also applicable to financial institutions, under the Bank Secrecy Act and the Office of Foreign Assets Control regulations; and
- Gramm-Leach-Bliley Act, which places limitations on the sharing of consumer financial information by financial institutions with unaffiliated third parties. Specifically, the Gramm-Leach-Bliley Act requires all financial institutions offering financial products or services to retail customers to provide such customers with the financial institution's privacy policy and provide such customers the opportunity to "opt out" of the sharing of certain personal financial information with unaffiliated third parties.

Holding Company Regulation

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

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

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

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

In December 2014, legislation was passed by Congress that requires the Federal Reserve to revise its "Small Bank Holding Company Policy Statement" to exempt bank and savings and loan holding companies with less than $1.0 billion of consolidated assets from the consolidated capital requirements, provided that such companies meet certain other conditions such as not engaging in significant nonbanking activities. The Federal Reserve maintains authority to apply the consolidated capital requirements to any bank or savings and loan holding company as warranted for supervisory purposes. Regulations implementing the exemption were effective in May 2015.

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

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

The Federal Deposit Insurance Act makes depository institutions liable to the FDIC for losses suffered or anticipated by the insurance fund in connection with the default of a commonly controlled depository institution or any assistance provided by the FDIC to such an institution in danger of default.

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

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

Federal Securities Laws

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

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

Sarbanes-Oxley Act of 2002

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

FEDERAL AND STATE TAXATION

Federal Taxation

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

On December 22, 2017 the Tax Act was signed into law. The Tax Act instituted significant changes to various sections of the Internal Revenue Code that effects the Company. Most notably, the Tax Act reduces the Company's marginal federal income tax rate from 34% to 21% starting January 1, 2018. Generally Accepted Accounting Principles ("GAAP") requires that the impact of the provisions of the Tax Act be accounted for in the period of enactment. Accordingly, the Company recorded an income tax benefit in the fourth quarter of 2017 related to the Tax Act in the amount of $155,000. The reduction in income tax expense was largely attributable to the reduction in the value of net deferred tax assets and liabilities reflecting lower future tax obligations resulting from the Tax Act's enacted lower federal corporate tax rate.

Our federal tax return for the year ended December 31, 2014 was audited commencing on March 31, 2017. Management believes that this audit was part of the Internal Revenue Service's normal audit and review cycle. The Company anticipates that this audit will be concluded without any material impact on the Company's financial position. The Company's federal tax returns have not been audited in the five years previous to 2014.

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

Bad Debt Reserves. Prior to 1996, Pathfinder Bank was permitted to establish a reserve for bad debts and to make annual additions to the reserve. These additions could, within specified formula limits, be deducted in arriving at our taxable income. As a result of tax law changes in 1996, Pathfinder Bank was required to use the specific charge-off method in computing its bad debt deduction beginning with its 1996 federal tax return. Savings institutions were required to recapture any excess reserves over those established as of December 31, 1987 (base year reserve). At December 31, 2017, Pathfinder Bank had no reserves subject to recapture in excess of its base year reserves. The Bank is required to use the specific charge-off method to account for tax bad debt deductions.

Taxable Distributions and Recapture. Prior to 1996, bad debt reserves created prior to 1988 were subject to recapture into taxable income if Pathfinder Bank failed to meet certain thrift asset and definitional tests or made certain distributions. Tax law changes in 1996 eliminated thrift-related recapture rules. However, under current law, pre-1988 tax bad debt reserves remain subject to recapture if Pathfinder Bank makes certain non-dividend distributions, repurchases any of its common stock, pays dividends in excess of earnings and profits, or fails to qualify as a "bank" for tax purposes. At December 31, 2017 our total federal pre-base year bad debt reserve was approximately $1.3 million.

Alternative Minimum Tax. The Tax Act repealed the alternative minimum tax on corporations for the years beginning after December 31, 2017.

Net Operating Loss Carryovers. Under pre-Tax Act law, generally, a financial institution may carry back net operating losses to the preceding two taxable years and forward to the succeeding 20 taxable years. Under the Act, for net operating losses arising in tax years ending after December 31, 2017, the two-year carryback limit is repealed for financial institutions and the net operating loss may be carried forward indefinitely. For losses arising in tax years beginning after December 31, 2017, the net operating loss deduction is limited to 80% of taxable income.

Corporate Dividends Received Deduction. The Company may exclude from its federal taxable income 100% of dividends received from Pathfinder Bank as a wholly-owned subsidiary by filing consolidated tax returns. The corporate dividends received deduction is 80% when the corporation receiving the dividend owns at least 20% of the stock of the distributing corporation. The dividends-received deduction is 70% when the corporation receiving the dividend owns less than 20% of the distributing corporation.

State Taxation

Banking corporations operating in New York State are taxed under the New York State General Business Corporation Franchise Tax provisions. Under this New York State tax law, the tax rate on the business income base is 6.5%. In addition, various modifications are available to community banks (defined as banks with less than $8 billion in total assets) regarding certain deductions associated with interest income. The previously-existing New York State alternative minimum tax for corporations was repealed effective January 1, 2015.

Our state tax returns were under audit for the years 2012-2014 by the New York State Department of Finance. The Company received a final notice that the audit was concluded on September 28, 2016, with no findings that were material to the financial position of the Company or its future operations. Our state tax returns had not been audited in the five years previous to the audit concluded on September 28, 2016.

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

ITEM 1A: RISK FACTORS

Not required of a smaller reporting company.

ITEM 1B: UNRESOLVED STAFF COMMENTS

None.

ITEM 2: PROPERTIES

The Company has seven offices located in Oswego County, two offices in Onondaga County and one loan production office in Oneida County. Management believes that the Bank's facilities are adequate for the business conducted. The following table sets forth certain information concerning the main office and each branch office of the Bank at December 31, 2017. The aggregate net book value of the Bank's premises and equipment was $16.1 million at December 31, 2017. For additional information regarding the Bank's properties, see Notes 8 and 18 to the consolidated financial statements.

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

(1) The building is owned; the underlying land is leased with an annual rent of $34,000.
(2) The building is owned; the underlying land is leased with an annual rent of $34,000.
(3) The premises are leased with an annual rent of $58,000.
(4) The premises are lease with an annual rent of $16,000.

ITEM 3: LEGAL PROCEEDINGS

There are various claims and lawsuits to which the Company is periodically involved that are incidental to the Company's business, most notably foreclosures. In the opinion of management, such claims and lawsuits in the aggregate are not expected to have a material adverse impact on the Company's consolidated financial condition and results of operations at December 31, 2017.

ITEM 4: MINE SAFETY DISCLOSURE

Not applicable.

PART II

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

The Company's common stock trades on the NASDAQ Capital Market under the symbol "PBHC."

There were 1,073 shareholders of record as of March 26, 2018. The following table sets forth the high and low closing bid prices and cash dividends paid per share of common stock for the periods indicated.

	Price per share		
Quarter Ended:	High	Low	Dividend Paid
December 31, 2017	$ 15.50	$ 15.10	$ 0.0575
September 30, 2017	$ 15.70	$ 15.00	$ 0.0550
June 30, 2017	$ 15.99	$ 14.55	$ 0.0525
March 31, 2017	$ 15.09	$ 13.02	$ 0.0500
December 31, 2016	$ 13.45	$ 12.06	$ 0.0500
September 30, 2016	$ 12.49	$ 11.27	$ 0.0500
June 30, 2016	$ 11.96	$ 10.81	$ 0.0500
March 31, 2016	$ 12.95	$ 10.95	$ 0.0500

The Company did not repurchase any shares of its common stock during the fourth quarter of 2017.

Equity Compensation Plan Information

The following table provides information as of December 31, 2017 with respect to shares of common stock that may be issued under the Company's existing equity compensation plans.

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights	Weighted-average exercise price of outstanding options, warrants and rights	Number of securities remaining available for future issuance under equity compensation plans
Equity compensation plans approved by security holders	395,177	$ 9.68	47,450
Equity compensation plans not approved by stockholders	N/A	N/A	N/A

Dividends and Dividend History

The Company (and its predecessor) has historically paid regular quarterly cash dividends on its common stock. The board of directors presently intends to continue the payment of regular quarterly cash dividends, subject to the need for those funds for debt service and other purposes. Payment of dividends on the common stock is subject to determination and declaration by the board of directors and will depend upon a number of factors, including capital requirements, regulatory limitations on the payment of dividends, Pathfinder Bank and its subsidiaries' results of operations and financial condition, tax considerations, and general economic conditions. More details are included within the section titled Regulation and Supervision.

ITEM 6: SELECTED FINANCIAL DATA

The following selected consolidated financial data sets forth certain financial highlights of the Company and should be read in conjunction with the consolidated financial statements and related notes, and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" included elsewhere in this Annual Report on Form 10-K.

	For the years ended December 31,				
Year End (In thousands, except per share amounts)	**2017**	**2016**	**2015**	**2014**	**2013**
Total assets	$ 881,257	$ 749,034	$ 623,254	$ 561,024	$ 503,793
Investment securities available-for-sale	171,138	141,955	98,942	88,073	80,959
Investment securities held-to-maturity	66,196	54,645	44,297	40,875	34,412
Loans receivable, net	573,705	485,900	424,732	382,189	336,592
Deposits	723,603	610,983	490,315	415,568	410,140
Borrowings and subordinated loans	88,947	73,972	56,291	71,255	46,008
Shareholders' equity	62,144	58,361	71,229	69,204	43,070
For the Year					
Total interest income	$ 29,413	$ 24,093	$ 21,424	$ 19,699	$ 18,883
Total interest expense	6,290	3,804	2,657	2,614	3,264
Net interest income	23,123	20,289	18,767	17,085	15,619
Provision for loan losses	1,769	953	1,349	1,205	1,032
Net interest income after provision for loan losses	21,354	19,336	17,418	15,880	14,587
Total noninterest income	4,179	4,183	4,172	3,759	3,416
Total noninterest expense	21,188	19,110	17,587	15,685	14,751
Net income before income taxes	4,345	4,409	4,003	3,954	3,252
Income tax expense	922	1,111	1,071	1,153	847
Net (loss) income attributable to noncontrolling interest	(68)	26	43	56	(1)
Net income	$ 3,491	$ 3,272	$ 2,889	$ 2,745	$ 2,406
Per Share					
Income per share - basic (a)	$ 0.86	$ 0.79	$ 0.67	$ 0.64	$ 0.58
Income per share - diluted (a)	0.83	0.78	0.66	0.63	0.58
Book value per common share	14.44	13.67	13.28	12.82	11.33
Tangible book value per common share	13.34	12.55	12.19	11.78	9.59
Cash dividends declared	0.215	0.200	0.160	0.120	0.120
Performance Ratios					
Return on average assets	0.42 %	0.48 %	0.48 %	0.51 %	0.48 %
Return on average equity	5.69	5.35	4.08	5.50	5.86
Average equity to average assets	7.47	8.97	11.76	9.27	8.24
Shareholders' Equity to total assets at end of year	7.01	7.73	11.36	12.26	8.55
Net interest rate spread	2.83	3.03	3.21	3.31	3.23
Net interest margin	2.97	3.14	3.31	3.40	3.34
Average interest-earning assets to average interest-bearing liabilities	116.05	118.35	121.73	117.88	115.85
Noninterest expense to average assets	2.61	2.81	2.92	2.92	2.96
Efficiency ratio (b)	79.13	79.90	78.22	76.51	79.14
Dividend payout ratio (c)	25.21	25.18	25.22	13.89	12.47
Return on average common equity	5.69	5.35	5.00	7.45	8.58

	For the years ended December 31,				
	2017	2016	2015	2014	2013
Asset Quality Ratios					
Nonperforming loans as a percent of total loans	0.84 %	0.98 %	1.24 %	1.61 %	1.57 %
Nonperforming assets as a percent of total assets	0.61	0.72	0.94	1.16	1.18
Allowance for loan losses to loans receivable	1.23	1.27	1.33	1.38	1.48
Allowance for loan losses as a percent of nonperforming loans	145.61	129.85	107.30	85.50	94.22
Regulatory Capital Ratios (Bank Only)					
Total capital (to risk-weighted assets)	13.97 %	14.79 %	16.22 %	16.60 %	14.13 %
Tier 1 capital (to risk-weighted assets)	12.72	13.54	14.95	15.31	12.82
Tier 1 capital (to adjusted assets)	8.16	9.06	10.00	10.55	8.72
Tier 1 Common Equity (to risk-weighted assets)	12.72	13.54	14.95	15.31	12.82
Number of:					
Banking offices	10	9	9	9	8
Fulltime equivalent employees	140	133	124	122	112

(a) Adjusted to reflect the 1.6472 exchange ratio used in the conversion for 2014 and prior years.

(b) The efficiency ratio is calculated as noninterest expense divided by the sum of net interest income and noninterest income, excluding net gains on sales, redemptions and impairment of investment securities and net gains (losses) on sales of loans and foreclosed real estate.

(c) The dividend payout ratio is calculated using dividends declared and not waived by Pathfinder Bancorp, MHC for periods prior to the Conversion and Offering that occurred on October 16, 2014, divided by net income.

NON-GAAP FINANCIAL INFORMATION

Regulation G, a rule adopted by the Securities and Exchange Commission (SEC), applies to certain SEC filings, including earnings releases, made by registered companies that contain “non-GAAP financial measures.” GAAP is generally accepted accounting principles in the United States of America. Under Regulation G, companies making public disclosures containing non-GAAP financial measures must also disclose, along with each non-GAAP financial measure, certain additional information, including a reconciliation of the non-GAAP financial measure to the closest comparable GAAP financial measure (if a comparable GAAP measure exists) and a statement of the Company’s reasons for utilizing the non-GAAP financial measure as part of its financial disclosures. The SEC has exempted from the definition of “non-GAAP financial measures” certain commonly used financial measures that are not based on GAAP. When these exempted measures are included in public disclosures, supplemental information is not required. Financial institutions, like the Company and its subsidiary bank, are subject to an array of bank regulatory capital measures that are financial in nature but are not based on GAAP and are not easily reconcilable to the closest comparable GAAP financial measures, even in those cases where a comparable measure exists. The Company follows industry practice in disclosing its financial condition under these various regulatory capital measures, including period-end regulatory capital ratios for its subsidiary bank, in its periodic reports filed with the SEC, and does so without compliance with Regulation G, on the widely-shared assumption that the SEC regards such non-GAAP measures to be exempt from Regulation G. The Company uses in this regulatory filing additional non-GAAP financial measures that are commonly utilized by financial institutions and have not been specifically exempted by the SEC from Regulation G. The Company provides, as supplemental information, such non-GAAP measures included in this document as described immediately below.

	For the years ended December 31,				
Year End (In thousands, except per share amounts)	2017	2016	2015	2014	2013
Per Share					
Book value per common share					
Total Pathfinder Bancorp, Inc. shareholders' equity (book value) (GAAP)	$ 61,811	$ 57,929	$ 70,805	$ 68,790	$ 42,712
Preferred stock	-	-	13,000	13,000	13,000
Total shares outstanding	4,280	4,237	4,354	4,352	2,623
Book value per common share	$ 14.44	$ 13.67	$ 13.28	$ 12.82	$ 11.33
Total common equity					
Total equity (GAAP)	$ 61,811	$ 57,929	$ 57,805	$ 55,790	$ 29,712
Goodwill	4,536	4,536	4,536	4,367	4,367
Intangible assets	182	198	214	175	187
Common equity	$ 57,093	$ 53,195	$ 53,055	$ 51,248	$ 25,158
Tangible book value per common share					
Common equity	$ 57,093	$ 53,195	$ 53,055	$ 51,248	$ 25,158
Total shares outstanding	4,280	4,237	4,354	4,352	2,623
Tangible book value per common share	$ 13.34	$ 12.55	$ 12.19	$ 11.78	$ 9.59
Performance Ratios					
Efficiency ratio					
Operating expenses (numerator)	$ 21,188	$ 19,110	$ 17,587	$ 15,685	$ 14,751
Net interest income	23,123	20,289	18,767	17,085	16,058
Noninterest income	4,179	4,183	4,172	3,759	3,416
Less: Gain on the sale/redemption of investment securities/loans/foreclosed real estate	526	554	456	344	835
Denominator	$ 26,776	$ 23,918	$ 22,483	$ 20,500	$ 18,639
Efficiency ratio	79.13 %	79.90 %	78.22 %	76.51 %	79.14 %
Dividend payout ratio					
Dividends declared (numerator)	$ 880	$ 820	$ 696	$ 368	$ 300
Net income available to common shareholders (denominator)	3,491	3,256	2,759	2,650	2,406
Dividend payout ratio	25.21 %	25.18 %	25.22 %	13.89 %	12.47 %
Return on average common equity					
Net income attributable to Pathfinder Bancorp Inc. (GAAP) (numerator)	$ 3,491	$ 3,272	$ 2,889	$ 2,745	$ 2,406
Average equity	61,383	61,102	70,819	49,870	41,028
Preferred stock	-	-	13,000	13,000	13,000
Denominator	$ 61,383	$ 61,102	$ 57,819	$ 36,870	$ 28,028
Return on average common equity	5.69 %	5.35 %	5.00 %	7.45 %	8.58 %

	For the years ended December 31,				
	2017	2016	2015	2014	2013
Regulatory Capital Ratios (Bank Only)					
Total capital (to risk-weighted assets)					
Total equity (GAAP)	$ 71,535	$ 66,846	$ 64,097	$ 61,308	$ 46,339
Goodwill	(4,536)	(4,536)	(4,536)	(4,367)	(4,367)
Intangible assets	(146)	(119)	(86)	(181)	(195)
Addback: Accumulated other comprehensive income	4,261	3,812	2,563	2,082	1,677
Total Tier 1 Capital	$ 71,114	$ 66,003	$ 62,038	$ 58,842	$ 43,454
Allowance for loan and lease losses	6,991	6,095	5,193	4,812	4,245
Unrealized Gain on available-for-sale securities	-	-	55	177	163
Total Tier 2 Capital	$ 6,991	$ 6,095	$ 5,248	$ 4,989	$ 4,408
Total Tier 1 plus Tier 2 Capital (numerator)	$ 78,105	$ 72,098	$ 67,286	$ 63,831	$ 47,862
Risk-weighted assets (denominator)	559,161	487,448	414,842	384,425	338,827
Total capital to risk-weighted assets	13.97 %	14.79 %	16.22 %	16.60 %	14.13 %
Tier 1 capital (to risk-weighted assets)					
Total Tier 1 capital (numerator)	$ 71,114	$ 66,003	$ 62,038	$ 58,842	$ 43,454
Risk-weighted assets (denominator)	559,161	487,448	414,842	384,425	338,827
Total capital to risk-weighted assets	12.72 %	13.54 %	14.95 %	15.31 %	12.82 %
Tier 1 capital (to adjusted assets)					
Total Tier 1 capital (numerator)	$ 71,114	$ 66,003	$ 62,038	$ 58,842	$ 43,454
Total average assets	876,263	733,512	625,018	562,100	503,140
Goodwill	(4,536)	(4,536)	(4,536)	(4,367)	(4,367)
Intangible assets	(146)	(119)	(86)	(181)	(195)
Adjusted assets (denominator)	$ 871,581	$ 728,857	$ 620,396	$ 557,552	$ 498,578
Total capital to adjusted assets	8.16 %	9.06 %	10.00 %	10.55 %	8.72 %
Tier 1 Common Equity (to risk-weighted assets)					
Total Tier 1 capital (numerator)	$ 71,114	$ 66,003	$ 62,038	$ 58,842	$ 43,454
Risk-weighted assets (denominator)	559,161	487,448	414,842	384,425	338,827
Total Tier 1 Common Equity to risk-weighted assets	12.72 %	13.54 %	14.95 %	15.31 %	12.82 %

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

INTRODUCTION

Throughout Management's Discussion and Analysis ("MD&A") the term, the "Company", refers to the consolidated entity of Pathfinder Bancorp, Inc. Pathfinder Bank and Pathfinder Statutory Trust II are wholly owned subsidiaries of Pathfinder Bancorp, Inc.; however, Pathfinder Statutory Trust II is not consolidated for reporting purposes (see Note 13 of the consolidated financial statements). Pathfinder REIT, Inc., Pathfinder Risk Management Company, Inc., and Whispering Oaks Development Corp. are wholly owned subsidiaries of Pathfinder Bank). Pathfinder REIT, Inc., ceased all operations in December 2017 and all of its assets and liabilities were transferred at that time to its parent entity, Pathfinder Bank. The cessation of Pathfinder REIT, Inc.'s operations and the transfer of all assets and liabilities from Pathfinder REIT, Inc. to Pathfinder Bank had no effect on the Company's consolidated financial position at December 31, 2017 or results of operations for the year ended December 31, 2017. The formal dissolution of Pathfinder REIT, Inc. as a legal entity will be completed in 2018.

On October 16, 2014, Pathfinder Bancorp, MHC converted from the mutual to stock form of organization. In connection with the Conversion, the Company sold 2,636,053 of common stock to depositors at $10.00 per share. Shareholders of Pathfinder-Federal, the Company's predecessor, received 1.6472 shares of the Company's common stock for each share of Pathfinder-Federal common stock they owned immediately prior to completion of the transaction. Following the completion of the Conversion, Pathfinder-Federal was succeeded by the Company, a Maryland corporation named Pathfinder Bancorp, Inc., and Pathfinder Bancorp, MHC ceased to exist. The Company had 4,280,227 and 4,326,744 shares outstanding at December 31, 2017 and December 31, 2016, respectively.

Our previously disclosed strategic conversion from a traditional savings bank to a commercial bank has been substantially completed. While not reducing our role as a leading originator of one-to-four family residential real estate loans within our marketplace, which had been our primary focus as a savings bank, we have substantially grown our business and commercial real estate loan portfolios over the past five years. As a commercial bank, we have been able to offer customized products and services to meet individual customer needs and thereby definitively differentiate our services from those offered by our competitors. As a result, we have been able to create a substantially more diversified loan portfolio than the one that was in place before the conversion process began. When compared to the Bank's loan portfolio composition prior to this strategic conversion, it is our view that this portfolio (1) significantly improves upon both the distribution of credit risk across a broader range of borrowers, industries and collateral types, and (2) is more likely to generate consistent net interest margins in a broader range of interest rate environments due to the portfolio's increased percentage of adjustable-rate assets. In a concurrent effort, the Bank has been able to fund the high level of growth in our loan portfolios primarily with deposits gathered from our local community. We believe that we have gathered these deposits at a reasonable overall cost in terms of interest, infrastructure and support service expenses.

We have consistently emphasized developing our business banking franchise by offering products that are attractive to small businesses in our market area. We seek to differentiate our loan solutions and related services through the maintenance of high standards of customer service, solution flexibility and convenience. Highlights of our business strategy are as follows:

- ***Continuing emphasis on business banking***. We intend to continue to use our branch office network and experienced commercial loan and deposit specialists to provide convenient commercial loan and deposit products and services to business customers. We believe that by developing our commercial relationships with small businesses we will be able to offer a variety of services and deposit products that will provide a sustainable source of net interest income and will become a growing source of fee income in the future. We will continue to introduce products and services designed to attract new business customers and increase the breadth of solutions that we can offer to our existing business customer base.
- ***Continuing our emphasis on commercial business and commercial real estate lending***. In recent years, we have successfully increased our commercial business and commercial real estate lending activities, consistent with safe and sound underwriting practices. In this regard, we have added, and will continue to add, personnel who are experienced in originating and underwriting commercial real estate and commercial business loans. We view the growth of our commercial business and commercial real estate loans as a means of further diversifying and increasing our interest income. In increasing our business banking activities, we are continuously deepening relationships with local businesses, which offer recurring and potentially increasing sources of both fee income and lower-cost transactional deposits. In that regard, our emphasis on commercial business and commercial real estate lending has complimented, and will continue to compliment, our traditional one-to-four family residential real estate lending.
- ***Diversifying our products and services with a goal of increasing non-interest income over time.*** We have sought to reduce our dependence on net interest income by increasing fee income from the value-added services that we

provide. We offer property and casualty and life insurance through our subsidiary, Pathfinder Risk Management Company, Inc., and its insurance agency subsidiary, the FitzGibbons Agency, LLC. Additionally, Pathfinder Bank's investment services provides brokerage services for purchasing stocks, bonds, mutual funds, annuities, and long-term care products. We intend to gradually grow these businesses. We believe that there will be opportunities to cross-sell these products to our deposit and loan customers which will increase our non-interest income over time.

- ***Continuing to grow our customer relationships and deposit base by expanding our branch network.*** As conditions permit, we will expand our branch network through a combination of de novo branching and acquisitions of branches and/or other financial services companies. We believe that as we expand our branch network, our customer relationships and deposit base will continue to grow. Our branch expansion focus will be primarily within Onondaga County, NY, which encompasses the greater Syracuse, NY area. We currently have two branches in Onondaga County and are actively seeking opportunities for an increased presence within that marketplace as we believe that we have already achieved meaningful brand recognition among potential customers there. Consistent with this strategy, we have recently acquired a vacated branch site in suburban Syracuse from another financial institution. This branch will be opened, pending regulatory approval, in the fall of 2018. We are also actively exploring the addition of a specific branch site within the City of Syracuse and will continue to seek similar opportunities in the future. In 2017, we opened a loan production office in Utica, located in Oneida County, NY, to increase our availability to potential commercial and business loan customers within that marketplace.
- ***Banking Platform and Technologies.*** We have committed significant resources to establish a banking platform to accommodate future growth by upgrading our information technology, maintaining a robust risk management and compliance staff, improving credit administration functionality, and upgrading our physical infrastructure. We believe that these investments will enable us to achieve operational efficiencies with minimal additional investments, while providing increased convenience for our customers.
- ***Managing Capital.*** The Company received $24.9 million in net proceeds from the sale of approximately 2.6 million shares of common stock as a result of the Conversion in October 2014. In October 2015, the Company executed the issuance of the $10.0 million non-amortizing Subordinated Loan and subsequently used those proceeds in February 2016 to substantially fund the full retirement of $13.0 million in SBLF Preferred stock. We have successfully leveraged this $27.9 million in net additional capital by growing our assets by $300.8 million, or 51.8%, since October 2014. It is our intent to balance our future growth with capital adequacy considerations in a manner that will continue to allow us to effectively serve all of our key stakeholders.
- ***Providing quality customer service.*** Our strategy emphasizes providing quality customer service and meeting the financial needs of our customer base by offering a full complement of loan, deposit, financial services and online banking solutions. Our competitive advantage is our ability to make decisions, such as approving loans, more quickly than our larger competitors. Customers enjoy, and will continue to enjoy, access to senior executives and local decision makers at Pathfinder Bank and the flexibility it brings to their businesses.

APPLICATION OF CRITICAL ACCOUNTING POLICIES

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

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

Allowance for Loan Losses. The allowance for loan losses represents management's estimate of probable loan losses inherent in the loan portfolio. Determining the amount of the allowance for loan losses is considered a critical accounting estimate because it requires significant judgment on the use of estimates related to the amount and timing of expected future cash flows on impaired loans, estimated losses on pools of homogeneous loans based on historical loss experience, and environmental factors, all of which may be susceptible to significant change. The Company establishes a specific allowance for all commercial loans in excess of the total related credit threshold of $100,000 and single borrower residential mortgage loans in excess of the total related credit threshold of $300,000 identified as being impaired which are on nonaccrual and have been risk rated under the Company’s risk rating system as substandard, doubtful, or loss. The Company also establishes a specific allowance, regardless to the size of the loan, for all loans subject to a troubled debt restructuring agreement. In addition, an accruing substandard loan could be identified as being impaired. The measurement of impaired loans is generally based upon the present value of future cash flows discounted at the historical effective interest rate, except that all collateral-dependent loans are measured for impairment based on the fair value of the collateral, less costs to sell. At December 31, 2017, the Bank’s position in impaired loans consisted of 51 loans totaling $9.2 million. Of these loans, 25 loans, totaling $5.3 million, were valued using the present value of future cash flows method; and 26 loans, totaling $3.9 million, were valued based on a collateral analysis. For all other loans, the Company uses the general allocation methodology that establishes an allowance to estimate the probable incurred loss for each risk-rating category. Note 1 to the consolidated financial statements describes the methodology used to determine the allowance for loan losses and a discussion of the factors driving changes in the amount of the allowance for loan losses is included in this report.

Deferred Income Tax Assets and Liabilities. Deferred income tax assets and liabilities are determined using the liability method. Under this method, the net deferred tax asset or liability is recognized for the future tax consequences. This is attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases as well as net operating and capital loss carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income tax expense in the period that includes the enactment date. If current available evidence about the future raises doubt about the likelihood of a deferred tax asset being realized, a valuation allowance is established. The judgment about the level of future taxable income, including that which is considered capital, is inherently subjective and is reviewed on a continual basis as regulatory and business factors change. In prior years, management believed that it may not have been able to generate sufficient future taxable income in the form of capital gains to offset its capital loss carry forward position before those potential tax benefits expired. Accordingly, a valuation allowance of $150,000 was maintained at December 31, 2016. During 2017, the Company recognized net capital gains of $428,000, effectively utilizing all capital loss carryforward tax benefits established in prior years and thereby eliminating the need for any valuation allowance related to the future utilization of those carryforwards at December 31, 2017. As a result, the Company maintained no valuation allowance related to future tax benefits related to the utilization of capital loss carryforwards at December 31, 2017.

On December 22, 2017 the Tax Act was signed into law. The Tax Act instituted significant changes to various sections of the Internal Revenue Code that effects the Company. Most notably, the Tax Act reduces the Company’s marginal federal income tax rate from 34% to 21% starting January 1, 2018. Generally Accepted Accounting Principles (“GAAP”) requires that the impact of the provisions of the Tax Act be accounted for in the period of enactment. Accordingly, the Company recorded an income tax benefit in the fourth quarter of 2017 related to the Tax Act in the amount of $155,000. The reduction in income tax expense was largely attributable to the reduction in the value of net deferred tax assets and liabilities reflecting lower future tax obligations resulting from the Tax Act’s enacted lower federal corporate tax rate.

The Company’s effective tax rate differs from the statutory rate due primarily to non-taxable interest income and other tax-advantaged income derived from investments in bank owned life insurance. In addition to these recurring reductions in the Company’s effective tax rates, its effective tax rate for 2017 was increased by the effects of the one-time incremental tax expense related to the Tax Act, partially offset by the tax-reducing effects of the utilization of its remaining capital loss carryforwards. See Note 17 to the consolidated financial statements contained herein.

Pension Obligations. Pension and postretirement benefit plan liabilities and expenses are based upon actuarial assumptions of future events, including fair value of plan assets, interest rates, and the length of time the Company will have to provide those benefits. The assumptions used by management are discussed in Note 14 to the consolidated financial statements contained herein.

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

Evaluation of Goodwill. Management performs an annual evaluation of the Company’s goodwill for possible impairment. Based on the results of the 2017 evaluation, management has determined that the carrying value of goodwill is not impaired as of December 31, 2017. The evaluation approach is described in Note 10 of the consolidated financial statements contained herein.

Estimation of Fair Value. The estimation of fair value is significant to several of our assets; including investment securities available-for-sale, interest rate derivative (discussed in detail in Note 22 of the consolidated financial statements), intangible assets, foreclosed real estate, and the value of loan collateral when valuing loans. These are all recorded at either fair value, or the lower of cost or fair value. Fair values are determined based on third party sources, when available. Furthermore, accounting principles generally accepted in the United States require disclosure of the fair value of financial instruments as a part of the notes to the consolidated financial statements. Fair values on our available-for-sale securities may be influenced by a number of factors; including market interest rates, prepayment speeds, discount rates, and the shape of yield curves.

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

RECENT EVENTS

On December 22, 2017, the board of directors declared a quarterly dividend of $0.0575 per common share. The dividend was payable on February 2, 2018 to shareholders of record on January 12, 2018.

EXECUTIVE SUMMARY AND RESULTS OF OPERATIONS

The Company reported net income of $3.5 million for 2017, an increase of $219,000, or 6.7%, as compared to net income of $3.3 million for 2016. Net income increased during 2017, as compared to the previous year, due to an increase in net interest income before the provision for loan losses of $2.8 million and a reduction of income tax expense of $189,000, partially offset by increases in noninterest expenses, and provision for loan losses of $2.0 million, and $816,000, respectively. Basic and diluted earnings per share in 2017 were $0.86 and $0.83, respectively, as compared to $0.79 and $0.78 in 2016, respectively. Return on average assets decreased to 0.42% in 2017 from 0.48% in 2016. Return on average equity increased 0.34% to 5.69% in 2017 as compared to 5.35% in 2016. The decrease in return on average assets in 2017, as compared to the previous year, was primarily due to the rate of increase in net income being below the rate of increase in average assets. Average assets increased in 2017 by $134.2 million, or 20.7% as the Company grew its total assets from $749.0 million at December 31, 2016 to $881.3 million at December 31, 2017. The increase in return on average equity in 2017, as compared to the previous year, was primarily due to the increase in net income in 2017.

Net interest income before provision for loan losses increased $2.8 million, or 14.0%, to $23.1 million in 2017 on average earning assets of $779.9 million as compared to net interest income before provision for loan losses of $20.3 million in 2016 on average earning assets of $645.7 million. Interest and dividend income increased $5.3 million in 2017 to $29.4 million, as compared to interest and dividend income of $24.1 million in 2016. The aggregate increase in the average balances of interest-earning assets of $134.2 million in 2017 led to an increase in interest income of $4.8 million, that was further enhanced by an increase of four basis points in the overall average yield earned on those assets that contributed an additional $524,000 in interest income in 2017, as compared to the previous year. The $5.3 million increase in interest income was partially offset by an increase in interest expense of $2.5 million due to an increase in average interest-bearing liabilities of $126.4 million and an increase in the average rate paid on those liabilities of 24 basis points in 2017 as compared to 2016.

The Company recorded a provision for loan losses of $1.8 million in 2017 as compared to $953,000 in the prior year. The $816,000 year-over-year increase in provision for loan losses reflects the effects of an 18% increase in aggregate loan balances from December 31, 2016 to December 31, 2017. This increase in year-over-year loan balances necessitated a corresponding increase in the provision for loan losses that was partially offset by the loan portfolio's generally improving credit quality metrics. In addition, the Company recorded a specific reserve of $300,000 for a single commercial real estate loan with an outstanding balance of $1.7 million. The loan is collateralized by a special-purpose property and the balance of the loan may not be fully realizable in the future. The Company recorded $890,000 in net charge-offs in 2017 as compared to $412,000 in net charge-offs in 2016. The ratio of net charge-offs to average loans increased to 0.16% in 2017 from 0.09% in 2016. The increase in the year-over-year charge-off rate was due primarily to the charge-off in 2017 of a single fully-reserved commercial real estate loan in the amount of $565,000.

Noninterest income was $4.2 million in both 2017 and 2016. Net gains on the sales and redemptions of investment securities decreased $105,000 to $489,000 in 2017. During 2017, the Company engaged in certain short-term interest hedging strategies that generated net gains of $428,000. In addition, the Company realized net gains on the sales and redemptions of investment securities of $61,000 as the Company sold certain securities as part of its overall asset management strategies. All other categories of noninterest income increased $101,000 in aggregate during 2017, as compared to the previous year, primarily due to gains on the sales of loans and foreclosed real estate that increased by $77,000.

Noninterest expense increased $2.1 million, or 10.9% in 2017 to $21.2 million in 2017 from $19.1 million in 2016. Noninterest expenses increased in 2017, as compared to the previous year, as all categories of expense increased in a manner that was substantially proportional to the Company's increased asset size.

The provision for income taxes decreased $189,000 between 2017 and 2016 primarily due to a recognized reduction of income tax expense in 2017 in the amount of $155,000 for the effects of the Tax Act. In addition, an additional reduction of $35,000 in income tax expense in 2017, as compared to the previous year, was due to increased utilization in 2017 of previously reserved-for capital loss carryforward credits. The reduction in income tax expense resulting from the recognition of the effects of the Tax Act was attributable to the reduction in net deferred tax assets and liabilities reflecting lower expected future tax outlays resulting from the Tax Act's reduction of the federal corporate tax rate.

Total assets were $881.3 million at December 31, 2017 as compared to $749.0 million at December 31, 2016. The increase in total assets of $132.2 million, or 17.7%, was the result of the increase in loans, largely commercial real estate and residential mortgages, and the increase in investment securities. The loan portfolio, net of the allowance for loan losses, increased $87.8 million and the investment securities portfolio, including FHLB stock, increased $41.3 million. The increase in total assets was funded largely by a $97.2 million increase in customer deposits, a $15.4 million increase in money market and time deposits acquired through the CDARS program, and by a net increase in borrowings from the FHLBNY of $14.9 million in 2017.

Measured as a percentage of total loans and total assets, the majority of loan credit quality metrics improved in 2017 as compared to the previous year. Nonperforming loans to total loans were 0.84% at December 31, 2017, down 14 basis points compared to 0.98% at December 31, 2016. The allowance for loan losses to non-performing loans at December 31, 2017 was 145.61%, compared with 129.85% at December 31, 2016. These improvements in credit quality measures were reflected in a slight decline in the ratio of the allowance for loan losses to year end loans decreasing from 1.27% at December 31, 2016 to 1.23% at December 31, 2017. This decrease reflects management's estimate of the probable losses inherent in the current loan portfolio.

The ratio of net charge-offs to average loans increased to 0.16% for 2017 as compared to 0.09% for 2016. This activity reflects charge-offs for those accounts deemed uncollectible but reserved for in prior years through the provision for loan losses. Total past due loans measured as a percent of total loans, increased from 1.98% at December 31, 2016 to 2.12% at December 31, 2017. The level of nonperforming loans increased in aggregate by $83,000, or 1.7%, led by an increase in nonperforming commercial and commercial real estate loans of $580,000, partially offset by a decrease in nonperforming residential real estate loans of $472,000. Commensurate with the decline in nonperforming loans to year end loans, the ratio of nonperforming assets to total assets decreased to 0.61% at December 31, 2017 from 0.72% at December 31, 2016. The improvements in our nonperforming loan measures largely reflect the $87.8 million increase in our aggregate loan portfolio achieved while we continued to maintain our conservative underwriting practices.

The Company’s shareholders’ equity increased $3.9 million, or 6.7%, to $61.8 million at December 31, 2017 from $57.9 million at December 31, 2016. This increase was primarily due to an increase in retained earnings of $3.4 million resulting from the Company’s reported net income of $3.5 million in 2017 and a one-time reclassification from additional paid-in capital to retained earnings of $790,000 (resulting in no net effect on total shareholders’ equity) related to “stranded tax effects” within accumulated other comprehensive income that resulted from the effects of remeasurement of deferred tax assets and liabilities related to the Tax Act. The Company elected to reclassify the “stranded tax effects” in accordance with *Accounting Standards Update 2018-02 (ASU 2018-02) – Income Statement – Reporting Comprehensive Income (Topic 220), Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income.* These increases to retained earnings were partially offset by common stock dividend distributions of $880,000. In addition, additional paid in capital increased $687,000 in 2017 due to stock-based compensation-related increases of $500,000 and accretion of unearned ESOP shares of $187,000. All other aggregate decreases to shareholders’ equity in 2017 related to recurring factors and totaled $206,000.

Net Interest Income

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

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

Net interest income, before provision for loan losses, increased $2.8 million, or 14.0%, to $23.1 million in 2017 as compared to $20.3 million in the previous year. Our net interest margin for the year ended December 31, 2017 decreased to 2.97% from 3.14% for the comparable prior year. Interest income increased $5.3 million, or 22.1%, in 2017 as compared to the previous year. The increase in interest income was primarily due to a 22.1% increase in interest and dividend income in 2017 to $29.4 million primarily as a result of the $134.2 million increase in the average balances on these earning assets. This increase in interest income was partially offset by an increase in interest expense on time deposits, MMDA accounts, FHLBNY borrowings (excluding short-term interest rate hedging activities) of $767,000, $685,000, and $505,000, respectively. Increases between 2017 and 2016 were recorded in average rates paid on FHLBNY borrowings, time deposits, and MMDA accounts of 38 basis points, 29 basis points and 18 basis points, respectively. In addition to interest paid to the FHLBNY, interest expense on borrowings also included $598,000 in net interest expense paid on short-term hedging activities in 2017 as compared to $88,000 in 2016.

Average Balances and Rates

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

	For the twelve months ended December 31,								
	2017			2016			2015		
(Dollars in thousands)	Average Balance	Interest	Average Yield / Cost	Average Balance	Interest	Average Yield / Cost	Average Balance	Interest	Average Yield / Cost
Interest-earning assets:									
Loans	$546,193	$24,392	4.47%	$455,129	$20,703	4.55%	$404,434	$18,450	4.56%
Taxable investment securities	184,170	3,827	2.08%	142,277	2,461	1.73%	118,035	2,190	1.86%
Tax-exempt investment securities	28,497	1,038	3.64%	32,387	865	2.67%	27,841	763	2.74%
Fed funds sold and interest-earning deposits	20,999	156	0.74%	15,898	64	0.40%	16,036	21	0.13%
Total interest-earning assets	779,859	29,413	3.77%	645,691	24,093	3.73%	566,346	21,424	3.78%
Noninterest-earning assets:									
Other assets	50,147			41,097			40,606		
Allowance for loan losses	(6,381)			(5,965)			(5,674)		
Net unrealized gains on available for sale securities	(1,642)			397			790		
Total assets	$821,983			$681,220			$602,068		
Interest-bearing liabilities:									
NOW accounts	$ 67,581	$ 105	0.16%	$ 56,541	$ 92	0.16%	$ 46,044	86	0.19%
Money management accounts	13,960	25	0.18%	14,392	35	0.24%	12,981	21	0.16%
MMDA accounts	231,671	1,384	0.60%	167,817	699	0.42%	125,396	628	0.50%
Savings and club accounts	84,092	82	0.10%	79,317	74	0.09%	75,307	62	0.08%
Time deposits	189,614	2,308	1.22%	165,464	1,541	0.93%	155,040	1,165	0.75%
Subordinated loans	15,041	794	5.28%	15,006	792	5.28%	6,826	300	4.39%
Borrowings	70,071	1,592	2.27%	47,051	571	1.21%	43,663	395	0.90%
Total interest-bearing liabilities	672,030	6,290	0.94%	545,588	3,804	0.70%	465,257	2,657	0.57%
Noninterest-bearing liabilities:									
Demand deposits	83,053			69,898			62,751		
Other liabilities	5,517			4,632			3,241		
Total liabilities	760,600			620,118			531,249		
Shareholders' equity	61,383			61,102			70,819		
Total liabilities & shareholders' equity	$821,983			$681,220			$602,068		
Net interest income		$23,123			$20,289			$18,767	
Net interest rate spread			2.83%			3.03%			3.21%
Net interest margin			2.97%			3.14%			3.31%
Ratio of average interest-earning assets to average interest-bearing liabilities			116.05%			118.35%			121.73%

Rate/Volume Analysis

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

	Years Ended December 31,					
	2017 vs. 2016 Increase/(Decrease) Due to			2016 vs. 2015 Increase/(Decrease) Due to		
(In thousands)	Volume	Rate	Total Increase (Decrease)	Volume	Rate	Total Increase (Decrease)
Interest Income:						
Loans	4,073	(384)	3,689	2,306	(53)	2,253
Taxable investment securities	811	555	1,366	427	(156)	271
Tax-exempt investment securities	(113)	286	173	122	(20)	102
Interest-earning deposits	25	67	92	-	43	43
Total interest income	4,796	524	5,320	2,855	(186)	2,669
Interest Expense:						
NOW accounts	17	(4)	13	19	(13)	6
Money management accounts	(1)	(9)	(10)	2	12	14
MMDA accounts	320	365	685	189	(118)	71
Savings and club accounts	5	3	8	3	9	12
Time deposits	247	520	767	82	294	376
Subordinated loans	2	-	2	421	71	492
Borrowings	367	654	1,021	33	143	176
Total interest expense	957	1,529	2,486	749	398	1,147
Net change in net interest income	$ 3,839	$ (1,005)	$ 2,834	$ 2,106	$ (584)	$ 1,522

Interest Income

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

Interest income increased $5.3 million, or 22.1%, to $29.4 million in 2017 as compared to $24.1 million in 2016 due principally to the $134.2 million, or 20.8%, increase in average interest-earning assets. The increase in average interest-earning assets was due to the increase in average balances of loans and taxable investment securities, which increased 20.0% and 29.4%, respectively. The increase in the average balance of loans was due principally to increases in adjustable-rate commercial real estate loans. The average yields earned on loans, however, decreased by eight basis point to 4.47% in 2017 from 4.55% in 2016 as maturing higher rate loans were replaced by loans at current lower market rates. The increase in the average balance of taxable investment securities was due principally to increases in fixed-rate residential and commercial mortgage-backed securities. The average yields earned on taxable investment securities increased 35 basis points to 2.08% in 2017 as compared to 1.73% in 2016, primarily due to increases in short-term interest rates that allowed amortizing and maturing security balances to be replaced in 2017 with generally higher-yielding securities.

Interest Expense

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

Interest expense increased $2.5 million to $6.3 million in 2017 compared to $3.8 million in 2016 due primarily to increases in interest expense on time deposits, MMDA accounts, time deposits, and FHLBNY borrowings of $767,000, $685,000, $505,000, respectively. Increases between 2017 and 2016 were recorded in average rates paid on FHLBNY borrowings, time deposits, and MMDA of 38 basis points, 29 basis points and 18 basis points, respectively. In addition to interest paid to the FHLBNY, interest expense on borrowings included $598,000 in net interest expense paid on short-term hedging activities in 2017 as compared to $88,000 in 2016.

In addition the effects on total interest expense paid in 2017 as compared to the previous year as a result of the increases in the rates paid on MMDA accounts, time deposits, FHLBNY borrowings, as noted above, total interest expense also increased in 2017, as compared to the previous year, due to increases in the average balance of MMDA accounts, time deposits, FHLBNY borrowings of $63.9 million, $24.2 million and $23.0 million, respectively. The average balance increase of time deposits in

2017 was due to an increase of $15.8 million in time deposits originated by the Bank customer base and $8.3 million in time deposits acquired through the CDARS program. The increase in the average balance of time deposits, and to a lesser extent, the increase in the average balance of MMDA accounts were largely the result of promotional activity designed to increase balances within these deposit categories.

In addition to the factors discussed above related to the increase in interest expense in 2017 as compared to the previous year, the Company incurred $598,000 in pre-tax interest expense related to short-term interest rate hedging activities in 2017. This represented an increase of $510,000 as compared to the pre-tax interest expense incurred as a result of those activities in 2016. On five occasions during 2017 and on one occasion in 2016, the Company sold, and subsequently repurchased, a U.S. Treasury security in the approximate amount of $40.0 million for each transaction in 2017 and in the amount of $25.0 million in 2016. These transactions were intended to act as hedges against rising short-term interest rates. The Company was in controlling possession of, but did not own, the securities at the time of each sale. The securities had been received by the Company, under industry-standard repurchase agreements, from an unrelated third party as collateral for 30-day loans approximately equal to the value of the sold Treasury security on each occasion which were made at market rates of interest to that third party in 2017 and at zero interest in 2016. The security sale on each occasion provided the funds necessary to advance the loan to the third party and placed the Company in what is generally described as a "short position" with respect to the sold U.S. Treasury security. These transactions acted as a hedge against rising short-term interest rates because the price of each sold security would be expected to decline in a rising short-term interest rate environment and could therefore be re-acquired at the conclusion of each 30-day loan period at a price lower than the price at which the security was originally sold. Short-term rates generally rose over the combined duration of these transactions and, consequently, the Company recognized aggregate gains on the sale and repurchase of the securities in the amounts of $428,000 for the twelve months ended December 31, 2017 and $85,000 for the same twelve month period in 2016. The transactions' gains were characterized as capital gains for tax purposes. These capital gains utilized existing, previously reserved-for, capital loss tax carryforwards that were established in 2013. The Company recognized tax benefits related to these transactions of $150,000 and $34,000 for the twelve months ended December 31, 2017 and 2016, respectively. The tax benefits arose from the reversal of reserves established in 2013 against the portion of the Company's deferred tax asset related to existing capital loss carryforward positions. The reserves were originally established due to the uncertainty at that time of the Company's ability to generate future capital gain income within the five-year statutory life of the capital loss carryforward position under the Internal Revenue Code. The reversals of these reserves against deferred tax assets had the effect of reducing the Company's effective income tax rate by 3.3% in 2017 and 0.8% in 2016.

The capital gain income and the additional recognized tax benefits derived from these transactions were partially offset by an additional $369,000 in after-tax interest expense on borrowings and an additional $54,000 in after-tax interest expense on borrowings for the years ended December 31, 2017 and 2016, respectively. In total, net after-tax net income was increased by $178,000 and $65,000 for 2017 and 2016, respectively, as a result of the hedging transactions.

All hedging transactions were closed at December 31, 2017 and 2016 and had no effect on the Company's consolidated financial position on those dates with the exception of deferred fees for consulting services related to the transactions in the amount of $53,000 at December 31, 2016. These deferred fees were recognized in other assets at December 31, 2016 and as a component of interest expense in 2017. The hedge position was closed as of December 31, 2017.

Provision for Loan Losses

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

The Company recorded a provision for loan losses of $1.8 million in 2017 as compared to $953,000 in the prior year. The $816,000 year-over-year increase in provision for loan losses reflects the effects of an 18% increase in aggregate loan balances from December 31, 2016 to December 31, 2017. This increase in year-over-year loan balances necessitated a corresponding increase in the provision for loan losses that was partially offset by the loan portfolio's generally improving credit quality metrics. In addition, the Company recorded a specific reserve of $300,000 for a single commercial real estate loan with an outstanding balance of $1.7 million. The loan is collateralized by a special-purpose property and the balance of the loan may not be fully realizable in the future. The Company recorded $890,000 in net charge-offs in 2017 as compared to $412,000 in net charge-offs in 2016. The ratio of net charge-offs to average loans increased to 0.16% in 2017 from 0.09% in 2016. The increase in the year-over-year charge-off rate was due primarily to the charge-off in 2017 of a single fully-reserved commercial real estate loan in the amount of $565,000.

Noninterest Income

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

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

	Years Ended December 31,			
(Dollars in thousands)	2017	2016	Change	
Service charges on deposit accounts	$ 1,130	$ 1,141	$ (11)	-1.0%
Earnings and gain on bank owned life insurance	284	307	(23)	-7.5%
Loan servicing fees	149	138	11	8.0%
Debit card interchange fees	578	557	21	3.8%
Other charges, commissions and fees	1,512	1,486	26	1.7%
Noninterest income before gains	3,653	3,629	24	0.7%
Net gains on sales and redemptions of investment securities	489	594	(105)	-17.7%
Net gains (losses) on sales of loans and foreclosed real estate	37	(40)	77	-192.5%
Total noninterest income	$ 4,179	$ 4,183	$ (4)	-0.1%

Noninterest income for the year ended December 31, 2017 decreased $4,000, or 0.1%, from the year ended December 31, 2016. Noninterest income before gains on the sales and redemptions of investment securities and gains (losses) on the sale of loans and foreclosed real estate increased $24,000, or 0.7%, to $3.7 million with all categories of such income remaining substantially identical in 2017 to the levels recorded in the previous year. Net gains on sales and redemptions of investment securities declined $105,000 in 2017 as compared to 2016 as a result of reductions of $448,000 in net gains in securities sold within the Company’s portfolio to $61,000 in 2017 as compared to $387,000 in 2016. These reductions in net gains from the sale of investment securities were partially offset by an increase in gains resulting from short-term interest rate hedging activities that increased to $428,000 in 2017 as compared to $85,000 in 2016. Net gains (losses) on sales of loans and foreclosed real estate increased $77,000 in 2017, as compared to the previous year, due to a limited number of activities in each year related to the dispositions of foreclosed real estate.

Noninterest Expense

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

	Years Ended December 31,			
(Dollars in thousands)	2017	2016	Change	
Salaries and employee benefits	$ 11,917	$ 10,772	$ 1,145	10.6%
Building occupancy	2,196	1,936	260	13.4%
Data processing	1,779	1,682	97	5.8%
Professional and other services	952	834	118	14.1%
Advertising	809	730	79	10.8%
FDIC assessments	473	345	128	37.1%
Audits and exams	353	329	24	7.3%
Other expenses	2,709	2,482	227	9.1%
Total noninterest expenses	$ 21,188	$ 19,110	$ 2,078	10.9%

Noninterest expense for 2017 increased $2.1 million, or 10.9%, to $21.2 million from $19.1 million for the prior year. Higher noninterest expenses largely reflect investments related to the Company’s continued efforts to expand brand awareness and increase its business activities in the Syracuse market, an increase in the Company’s risk management capabilities and to improve its service levels to customers. Specifically, the year-over-year increase in noninterest expenses was due in part to higher personnel expenses that increased $1.1 million, or 10.6%, in 2017 as compared to 2016. These increases resulted primarily from increases of $521,000, or 7.8%, in salaries, $207,000, or 21.5%, in commission expense (of which $202,000 of the increase related to incentives paid to the senior management team of the FitzGibbons Agency), $158,000, or 13.3%, in employee benefits and $152,000, or 25.5%, in stock-based compensation. The increase in salaries expense was due to the expansion of the Company's staffing levels in a number of areas, primarily focused on enhanced business development, risk management activities and service-related activities. Employee benefits expense increased due to increases in employee medical insurance premiums of $65,000 and increased 401(k) contributions of $46,000 in 2017 as compared to the previous year. Stock-based compensation increased due to the adoption of new stock-based compensation plans approved by a vote of the shareholders in May of 2016 and reflect a full year of those costs in 2017, as well as the granting of options previously available from plans adopted with shareholder consent in prior years.

Building and occupancy expense increased $260,000, or 13.4%, primarily due to increased maintenance, depreciation and communications expenses principally related to the Company's ongoing refurbishment and modernization programs for its physical facilities.

Data Processing expense increased $97,000, or 5.8%, primarily due to increased transaction-related fees paid to third-party vendors. These increased fees resulted from higher transaction volumes derived from both greater numbers of customers in 2017, as compared to the previous year, and increased utilization levels by existing customers of the Bank's electronic banking offerings.

Professional and other services expense increased $118,000, or 14.1%, primarily due to the increased use of external management consulting services related to operational and strategic planning in 2017.

Advertising expense increased $79,000, or 10.8%, in 2017 as compared to the previous year, as the Company's management sought to increase brand awareness and corresponding business activity within the Company's market area, particularly in Onondaga County.

FDIC assessments expense increased $128,000, or 37.1%, in 2017 primarily due to the $138.1 million, or 20.7%, increase in total average assessable net assets to $806.1 million at December 31, 2017 from $668.0 million at December 31, 2016. In addition, the Company's overall FDIC assessment rate increased in 2017 as a result of the dissolution of Pathfinder Commercial Bank. Pathfinder Commercial Bank had received favorable assessment rate treatment as a stand-alone entity due to the limited scope of its deposit gathering and investment activities. Pathfinder Commercial Bank, which was a subsidiary of Pathfinder Bank, was merged into Pathfinder Bank in 2016 and the overall assessment rate has been increasing for the merged Pathfinder Bank as the beneficial blending of the Commercial Bank's more favorable rate has been phased out in succeeding assessment periods.

Audits and exams expense increased $24,000, or 7.3%, in 2017 principally due to increased utilization of third-party internal audit services in 2017 as compared to the previous year.

Other expenses increased in 2017 by $227,000 as compared to the previous year, principally due to increases in ORE expenses of $90,000, expenses associated with "no closing cost" customer loans of $28,000, meals and entertainment expenses of $21,000 and community service donations of $17,000. All other categories of other expenses increased in 2017 in aggregate by $71,000, as compared to 2016.

Income Tax Expense

The Company reported income tax expense of $922,000 in 2017 and $1.1 million in 2016. Income tax expense decreased $189,000 in 2017. On December 22, 2017 the Tax Act was signed into law. The Tax Act instituted significant changes to various sections of the Internal Revenue Code that effects the Company. Most notably, the Tax Act reduces the Company's marginal federal income tax rate from 34% to 21% starting January 1, 2018. Generally Accepted Accounting Principles ("GAAP") requires that the impact of the provisions of the Tax Act be accounted for in the period of enactment. Accordingly, the Company recorded an income tax benefit in the fourth quarter of 2017 related to the Tax Act in the amount of $155,000. The reduction in income tax expense was largely attributable to the reduction in the value of net deferred tax assets and liabilities reflecting lower future tax obligations resulting from the Tax Act's enacted lower federal corporate tax rate. Absent this one-time income tax benefit, the Company's income tax expense for 2017 would have been $1.1 million, a reduction of $34,000 from 2016. The Company's reported effective tax rate for 2017 was 20.6% as compared to 25.5% in 2016. Absent this one-time tax benefit discussed above, the Company's effective tax rate in 2017 would have been 24.0%.

The Company's effective tax rate, absent the effects of the one-time benefit related to the Tax Act, was further reduced by 3.4% from 24.0% to 20.6% due to the reversal of $150,000 in allowances for deferred tax assets related to capital loss carryforward tax positions established in previous years. The company was able to generate sufficient capital gains in 2017 to offset all capital loss carryforward positions at December 31, 2016 and thereby eliminate the need for a reserve against their related deferred tax assets. The Company's effective tax rate was reduced by 0.8% from 26.3% in 2016 to 25.5% due to the reversal of $34,000 in allowances for deferred tax assets related to capital loss carryforward tax positions established in previous years. At December 31, 2017, the Company had no unused capital loss carryforward positions or deferred tax assets related to those positions.

The Company's effective tax rate differs from the federal statutory rate due primarily to non-taxable interest income and other tax-advantaged income derived from investments in bank owned life insurance, partially offset by the effects of state income taxes. See Note 17 to the consolidated financial statements for the reconciliation of the statutory tax rate to the effective tax rate.

Earnings Per Share

Basic and diluted earnings per share for the year ended December 31, 2017 were $0.86 and $0.83, respectively, as compared to basic and diluted earnings per share of $0.79 and $0.78 for the year ended December 31, 2016. The decrease in basic and diluted earnings per share comparing year-over-year periods was due to the decrease in net income available to common shareholders between these two years.

CHANGES IN FINANCIAL CONDITION

Total assets were $881.3 million at December 31, 2017 as compared to $749.0 million at December 31, 2016. The increase in total assets of $132.2 million, or 17.7%, was the result of the increase in loans, largely commercial real estate and residential mortgages, and the increase in investment securities. The loan portfolio, net of the allowance for loan losses, increased $87.8 million and the investment securities portfolio increased $40.7 million. The increase in total assets was funded largely by a $97.2 million increase in customer deposits, a $15.4 million increase in time deposits acquired through the CDARS program and by a net increase in borrowings from the FHLBNY of $14.9 million in 2017.

Investment Securities

The investment portfolio represented 27.3% of the Company's average interest earning assets in 2017 and is designed to generate a favorable rate of return consistent with safety of principal while assisting the Company in meeting its liquidity needs and interest rate risk strategies. All of the Company's investments are classified as either available-for-sale or held-to-maturity. The Company does not hold any trading securities. The Company invests primarily in securities issued by United States Government agencies and sponsored enterprises ("GSE"), mortgage-backed securities, collateralized mortgage obligations, state and municipal obligations, mutual funds, equity securities, investment grade corporate debt instruments, and common stock issued by the Federal Home Loan Bank of New York ("FHLBNY"). By investing in these types of assets, the Company reduces the credit risk of its asset base through geographical and collateral-type diversification but must accept lower yields than would typically be available on loan products. Our mortgage-backed securities and collateralized mortgage obligations portfolio includes privately-issued but substantially over-collateralized pass-through securities as well as pass-through securities guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae. The investment securities portfolio has approximately 6.6% of its composition in pass-through securities comprised of seasoned mortgage-backed securities whose collateral was considered sub-prime or high-risk at their time of issuance. These privately-issued mortgage-backed securities are believed to be over collateralized by subordinate structures and therefore extremely well insulated from loss of principal due to credit default.

At December 31, 2017, available-for-sale and held-to-maturity investment securities increased 20.6% to $171.1 million and 21.1% to $66.2 million, respectively. There were no securities that exceeded 10% of consolidated shareholders' equity. See Note 4 to the consolidated financial statements for further discussion on securities.

Our available-for-sale investment securities are carried at fair value and our held-to-maturity investment securities are carried at amortized cost.

The following table sets forth the carrying value of the Company's investment portfolio at December 31:

	Available-for-Sale		**Held-to-Maturity**	
(In thousands)	2017	2016	2017	2016
Investment Securities:				
US treasury, agencies and GSEs	$ 41,336	$ 24,184	$ 4,948	$ 4,928
State and political subdivisions	13,681	16,481	35,130	30,697
Corporate	8,600	15,195	8,311	8,240
Asset backed securities	6,644	6,664	-	-
Residential mortgage-backed - US agency	35,742	30,566	6,853	6,386
Collateralized mortgage obligations - US agency	53,348	40,986	7,574	2,927
Collateralized mortgage obligations - Private label	11,052	6,577	3,380	1,467
Mutual funds	-	626	-	-
Equity securities	735	676	-	-
Total investment securities	$ 171,138	$ 141,955	$ 66,196	$ 54,645

The following table sets forth the scheduled maturities, amortized cost, fair values and average yields for the Company's investment securities at December 31, 2017. Average yield is calculated on the amortized cost to maturity. Adjustable rate mortgage-backed securities are included in the period in which interest rates are next scheduled to be reset.

AVAILABLE FOR SALE

	One Year or Less		More Than One to Five Years		More Than Five to Ten Years	
(Dollars in thousands)	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Annualized Weighted Avg Yield
Debt investment securities:						
US Treasury, agencies and GSEs	$ 20,982	1.05%	$ 20,507	1.59%	$ -	-
State and political subdivisions	511	1.43%	6,464	2.38%	1,984	1.72%
Corporate	62	2.61%	756	3.76%	5,967	2.54%
Asset backed securities	-	-	1,230	4.44%	3,636	3.02%
Total	$ 21,555	1.06%	$ 28,957	1.94%	$ 11,587	2.55%
Mortgage-backed securities:						
Residential mortgage-backed - US agency	$ -	-	$ 5,392	2.19%	$ 8,742	1.99%
Collateralized mortgage obligations - US agency	-	-	7,663	2.35%	6,161	2.09%
Collateralized mortgage obligations - Private label	-	-	-	-	-	-
Total	$ -	-	$ 13,055	2.28%	$ 14,903	2.03%
Other non-maturity investments:						
Equity securities	$ 663	1.74%	$ -	-	$ -	-
Total	$ 663	1.74%	$ -	-	$ -	-
Total investment securities	$ 22,218	1.08%	$ 42,012	2.05%	$ 26,490	2.26%

	More Than Ten Years		Total Investment Securities		
(Dollars in thousands)	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Fair Value	Annualized Weighted Avg Yield
Debt investment securities:					
US Treasury, agencies and GSEs	$ -	-	$ 41,489	$ 41,336	1.32%
State and political subdivisions	5,001	1.97%	13,960	13,681	2.11%
Corporate	1,799	4.01%	8,584	8,600	2.95%
Asset backed securities	1,796	2.98%	6,662	6,644	3.27%
Total	$ 8,596	2.61%	$ 70,695	$ 70,261	1.86%
Mortgage-backed securities:					
Residential mortgage-backed - US agency	$ 22,080	2.20%	$ 36,214	$ 35,742	2.15%
Collateralized mortgage obligations - US agency	40,657	2.31%	54,481	53,348	2.29%
Collateralized mortgage obligations - Private label	11,193	2.99%	11,193	11,052	2.99%
Total	$ 73,930	2.38%	$ 101,888	$ 100,142	2.32%
Other non-maturity investments:					
Equity securities	$ -	-	$ 663	$ 735	1.74%
Total	$ -	-	$ 663	$ 735	1.74%
Total investment securities	$ 82,526	2.40%	$ 173,246	$ 171,138	2.13%

HELD-TO-MATURITY

	One Year or Less		More Than One to Five Years		More Than Five to Ten Years	
(Dollars in thousands)	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Annualized Weighted Avg Yield
Debt investment securities:						
US Treasury, agencies and GSEs	$ -	-	$ 4,948	1.97%	$ -	-
State and political subdivisions	1,680	1.60%	5,328	2.79%	12,023	3.35%
Corporate	-	-	1,105	3.37%	4,970	5.25%
Total	$ 1,680	1.60%	$ 11,381	2.49%	$ 16,993	3.91%
Mortgage-backed securities:						
Residential mortgage-backed - US agency	$ -	-	$ -	-	$ 2,384	2.36%
Collateralized mortgage obligations - US agency	-	-	1,929	3.22%	1,012	3.05%
Collateralized mortgage obligations - Private label	-	-	-	-	-	-
Total	$ -	-	$ 1,929	-	$ 3,396	2.57%
Total investment securities	$ 1,680	1.60%	$ 13,310	2.60%	$ 20,389	3.68%

	More Than Ten Years		Total Investment Securities		
(Dollars in thousands)	Amortized Cost	Annualized Weighted Avg Yield	Amortized Cost	Fair Value	Annualized Weighted Avg Yield
Debt investment securities:					
US Treasury, agencies and GSEs	$ -	-	$ 4,948	$ 4,948	1.97%
State and political subdivisions	16,099	2.74%	35,130	35,460	2.90%
Corporate	2,236	3.74%	8,311	8,303	4.59%
Total	$ 18,335	2.86%	$ 48,389	$ 48,711	3.09%
Mortgage-backed securities:					
Residential mortgage-backed - US agency	$ 4,469	2.87%	$ 6,853	$ 6,896	2.69%
Collateralized mortgage obligations - US agency	4,633	3.51%	7,574	7,442	3.37%
Collateralized mortgage obligations - Private label	3,380	2.39%	3,380	3,377	2.39%
Total	$ 12,482	2.98%	$ 17,807	$ 17,715	2.92%
Total investment securities	$ 30,817	2.91%	$ 66,196	$ 66,426	3.05%

The yield information disclosed above does not give effect to changes in fair value that are reflected in accumulated other comprehensive loss in consolidated shareholders’ equity.

Loans Receivable

Average loans receivable represented 70.0% of the Company's average interest earning assets in 2017 and account for the greatest portion of total interest income. At December 31, 2017, the Company has the largest portion of its loan portfolio in commercial loan products that represent 52.4% of total loans. These products include credits extended to businesses and political subdivisions within its marketplace that are typically secured by commercial real estate, equipment, inventories, and accounts receivable. The residential mortgage loans product segment represents 38.2% of total loans at December 31, 2017. The Company has seen the proportion of commercial loan products to total loans increase in recent years and it will continue to emphasize these types of loans. Notwithstanding this emphasis, the Company also anticipates a continued commitment to financing the purchase or improvement of residential real estate in its market area.

The following table sets forth the composition of our loan portfolio, including net deferred costs, in dollar amount and as a percentage of loans. There were no loans classified as loans held for sale at the dates indicated.

	December 31,									
(Dollars in thousands)	2017		2016		2015		2014		2013	
Residential real estate	$221,623	38.2%	$206,900	42.0%	$189,367	44.0%	$175,322	45.2%	$168,493	49.3%
Commercial real estate	192,540	33.2%	150,569	30.6%	129,481	30.1%	125,883	32.5%	95,510	28.0%
Commercial and tax exempt	111,786	19.2%	103,394	21.0%	83,016	19.3%	59,268	15.3%	52,241	15.3%
Home equity and junior liens	26,235	4.5%	24,991	5.1%	23,688	5.5%	22,905	5.9%	21,223	6.2%
Consumer loans	28,647	4.9%	6,293	1.3%	4,886	1.1%	4,160	1.1%	4,166	1.2%
Total loans receivable	$580,831	100.0%	$492,147	100.0%	$430,438	100.0%	$387,538	100.0%	$341,633	100.0%

The following table shows the amount of loans outstanding, including net deferred costs, as of December 31, 2017 which, based on remaining scheduled repayments of principal, are due in the periods indicated. Demand loans having no stated schedule of repayments, no stated maturity, and overdrafts are reported as one year or less. Adjustable and floating rate loans are included in the period on which interest rates are next scheduled to adjust, rather than the period in which they contractually mature. Fixed rate loans are included in the period in which the final contractual repayment is due.

(In thousands)	Due Under One Year	Due 1-5 Years	Due Over Five Years	Total
Real estate:				
Commercial real estate	$ 3,555	$ 4,555	$ 184,430	$ 192,540
Residential real estate	190	3,495	217,938	221,623
	3,745	8,050	402,368	414,163
Commercial and tax exempt	50,379	24,842	36,565	111,786
Home Equity and junior liens	19	1,071	25,145	26,235
Consumer	1,019	12,548	15,080	28,647
Total loans	$ 55,162	$ 46,511	$ 479,158	$ 580,831

The following table sets forth fixed- and adjustable-rate loans at December 31, 2017 that are contractually due after December 31, 2017:

(In thousands)	Due After One Year
Interest rates:	
Fixed	$ 313,489
Variable	212,180
Total loans	$ 525,669

Total loans receivable, including net deferred costs, increased $88.7 million, or 18.0%, to $580.8 million at December 31, 2017 when compared to the prior year, primarily due to the growth in adjustable-rate commercial and commercial real estate loans, and fixed-rate residential mortgage loans. The Company does not originate sub-prime, Alt-A, negative amortizing or other higher risk structured residential mortgages. Commercial and commercial real estate loans increased $50.4 million, or 19.8%, to $304.3 at December 31, 2017 as compared to $253.9 million at December 31, 2016. The Company maintained its previously established credit standards, but continued to benefit from the growth of the office in downtown Syracuse that opened in 2014 and expanding relationship-derived business activity within the markets that the Bank serves.

Nonperforming Loans and Assets.

The following table represents information concerning the aggregate amount of nonperforming assets:

	December 31,				
(Dollars In thousands)	2017	2016	2015	2014	2013
Nonaccrual loans:					
Commercial and commercial real estate loans	$ 2,443	$ 1,863	$ 3,238	$ 4,030	$ 2,709
Consumer	363	388	365	324	447
Residential mortgage loans	2,088	2,560	1,715	1,902	2,194
Total nonaccrual loans	4,894	4,811	5,318	6,256	5,350
Total nonperforming loans	4,894	4,811	5,318	6,256	5,350
Foreclosed real estate	468	597	517	261	619
Total nonperforming assets	$ 5,362	$ 5,408	$ 5,835	$ 6,517	$ 5,969
Accruing troubled debt restructurings	$ 2,539	$ 5,531	$ 1,916	$ 2,219	$ 2,459
Nonperforming loans to total loans	0.84%	0.98%	1.24%	1.61%	1.57%
Nonperforming assets to total assets	0.61%	0.72%	0.94%	1.16%	1.18%

Nonperforming assets include nonaccrual loans, nonaccrual troubled debt restructurings (“TDR”), and foreclosed real estate (“FRE”). Loans are considered a TDR when, due to a borrower’s financial difficulties, the Company makes a concession(s) to the borrower that it would not otherwise consider. These modifications may include an extension of the term of the loan, and granting a period when interest-only payments can be made, with the principal payments made over the remaining term of the loan or at maturity. TDRs are included in the above table within the categories of nonaccrual loans or accruing TDRs.

Total nonperforming loans increased $83,000 between December 31, 2016 and December 31, 2017, driven by a $580,000 increase in commercial and commercial real estate nonperforming loans, partially offset by decreases of $472,000 and $25,000 in nonperforming residential real estate and consumer loans, respectively. The increase in nonperforming commercial and commercial real estate loans was comprised of 18 loans that were nonperforming at December 31, 2017 as compared to 12 loans that were nonperforming at December 31, 2016. The decrease in nonperforming residential real estate loans was comprised of 28 loans that were nonperforming at December 31, 2017 as compared to 33 loans that were nonperforming at December 31, 2016. Management believes that the increases in nonperforming commercial and commercial real estate loans are transitory and that the value of the collateral properties underlying the loans is sufficient to preclude any significant losses related to these loans. Management continues to monitor and react to national and local economic trends as well as general portfolio conditions which may impact the quality of the portfolio, and considers these environmental factors in support of the allowance for loan loss reserve. Management believes that the current level of the allowance for loan losses, at $7.1 million at December 31, 2017, adequately addresses the current level of risk within the loan portfolio, particularly considering the types and levels of collateralization supporting the substantial majority of the portfolio. The Company maintains strict loan underwriting standards and carefully monitors the performance of the loan portfolio.

Foreclosed Real estate (“FRE”) balances decreased by $129,000 at December 31, 2017, from the prior year and reflects the timing of foreclosures versus sales in 2017. FRE properties decreased from seven to five between these two dates.

The Company generally places a loan on nonaccrual status and ceases accruing interest when loan payment performance is deemed unsatisfactory and the loan is past due 90 days or more. There are no loans that are past due 90 days or more and still accruing interest. The Company considers a loan impaired when, based on current information and events, it is probable that the Company will be unable to collect the scheduled payments of principal and interest when due according to the contractual terms of the loan.

Had the loans in nonaccrual status performed in accordance with their original terms, additional interest income of $66,000 and $51,000 would have been recorded for the years ended December 31, 2017 and December 31, 2016, respectively.

The measurement of impaired loans is based upon the fair value of the collateral or the present value of future cash flows discounted at the historical effective interest rate for impaired loans when the receipt of contractual principal and interest is probable. At December 31, 2017 and December 31, 2016, the Company had $9.2 million and $8.6 million in loans, which were deemed to be impaired, each having specific reserves of $1.1 million. The $571,000 year-over-year increase in impaired loans was principally due to a $428,000 increase in impaired commercial real estate loans, and a $245,000 increase in impaired residential real estate loans. All other loan product segments (which include commercial loans, home equity loans, junior liens and other consumer loans) reported modest year-over-year decreases in impaired loans of $102,000 in aggregate. The threshold for individually measuring impairment on commercial real estate or commercial loans remains at $100,000 and for residential mortgage loans remains at $300,000 at December 31, 2017. The thresholds described above do not apply to loans that have been classified as troubled debt restructurings, which are individually measured for impairment at the time that the restructuring is affected.

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

Management has identified certain loans with potential credit which may result in the borrowers not being able to comply with the current loan repayment terms and which may result in possible future impaired loan reporting. Potential problem loans decreased $2.9 million to $4.0 million at December 31, 2017, compared to $6.9 million at December 31, 2016. These loans have been internally classified as special mention, substandard, or doubtful, yet are not currently considered impaired. The decrease in potential problem loans was primarily due to a $2.5 million decrease in potential problem commercial real estate loans and a $453,000 decrease in potential problem commercial lines of credit. Potential problem loans decreased $41,000 in aggregate within all other loan product segments. The $2.5 million decrease in potential problem commercial real estate loans in 2017 was primarily due to the repayment in full of a single commercial real estate loan with an outstanding balance of $2.1 million during 2017 that had been a classified as a TDR at December 31, 2016.

Total potential problem loans, including impaired loans, were $13.2 million at December 31, 2017, comprised of special mention, substandard and doubtful loans of $3.0 million, $5.3 million and $4.9 million, respectively. Total problem loans were $15.5 million at December 31, 2016, comprised of special mention, substandard and doubtful loans of $6.7 million, $7.5 million and $1.3 million, respectively. Special mention and substandard loans declined $3.7 million and $2.2 million, respectively, at December 31, 2017 as compared to December 31, 2016, partially offset by an increase of $3.6 million in loans classified as doubtful. The increase in loans classified as doubtful was primarily due to increases of $2.1 million in commercial real estate loans and $1.1 million in residential real estate loans. The increase of $2.2 million in commercial real estate loans classified as doubtful at December 31, 2017, as compared to December 31, 2016, was primarily due to the classification of a single commercial real estate loans as doubtful with an outstanding balance of $1.7 million. The increase of $1,1 million in residential real estate loans classified as doubtful at December 31, 2017, as compared to December 31, 2016, was primarily due to the classification of two residential real estate loans as doubtful with a combined outstanding balance of $810,000.

The Company measures delinquency based on the amount of past due loans as a percentage of total loans. The ratio of delinquent loans to total loans increased to 2.12% at December 31, 2017 as compared to 1.98% at December 31, 2016. Delinquent loans increased $2.6 million year-over-year which represented a rate of increase that was modestly more than the rate of increase in total loan balances. At December 31, 2017, there were $12.4 million in loans past due including $4.3 million, $3.2 million and $4.9 million in loans 30-59 days, 60-89 days, and greater than 90 days past due, respectively. At December 31, 2016, there were $9.8 million in loans past due including $3.6 million, $1.4 million and $4.8 million in loans 30-59 days, 60-89 days, and greater than 90 days past due, respectively.

The increase of $2.6 million in total loans past due at December 31, 2017, as compared to December 31, 2016, was primarily due to an increase of $1.8 million in loans 60-89 days past due. The increase in loans 60-89 days past due at December 31, 2017, as compared to December 31, 2016, was primarily due to one commercial real estate loan with an outstanding balance of $1.7 million that was 60-89 days past due at December 31, 2017. Loans delinquent 90 days and over represented 0.84% of the total loan portfolio at December 31, 2017, as compared to 0.98% of the total loan portfolio at December 31, 2016.

The ratio of the allowance to loan losses to period-end loans at December 31, 2017 was 1.23% as compared to 1.27% at December 31, 2016.

In the normal course of business, the Bank has, from time to time, sold residential mortgage loans and participation interests in commercial loans. As is typical in the industry, the Bank makes certain representations and warranties to the buyer. Pathfinder Bank maintains a quality control program for closed loans and considers the risks and uncertainties associated with potential repurchase requirements to be minimal.

Allowance for Loan Losses

The allowance for loan losses is established through provision for loan losses and reduced by loan charge-offs net of recoveries. The allowance for loan losses represents the amount available for probable credit losses in the Company's loan portfolio as estimated by management. In its assessment of the qualitative factors used in arriving at the required allowance for loan losses, management considers changes in national and local economic trends, the rate of the portfolios' growth, trends in delinquencies and nonaccrual balances, changes in loan policy, and changes in management experience and staffing. These factors, coupled with the recent historical loss experience within the loan portfolio by product segment support the estimable and probable losses within the loan portfolio.

The Company establishes a specific allocation for all commercial loans identified as being impaired with a balance in excess of $100,000 that are also on nonaccrual or have been risk rated under the Company's risk rating system as substandard, doubtful, or loss. The measurement of impaired loans is based upon either the present value of future cash flows discounted at the historical effective interest rate or the fair value of the collateral, less costs to sell for collateral dependent loans. At December 31, 2017, the Bank's position in impaired loans consisted of 51 loans totaling $9.2 million. Of these loans, 25 loans, totaling $5.3 million, were valued using the present value of future cash flows method; and 26 loans, totaling $3.9 million, were valued based on a collateral analysis. The Company uses the fair value of collateral, less costs to sell to measure impairment on commercial and commercial real estate loans. Residential real estate loans in excess of $300,000 will also be included in this individual loan review. Residential real estate loans less than this amount will be included in impaired loans if it is part of the total related credit to a previously identified impaired commercial loan. The Company also establishes a specific allowance, regardless to the size of the loan, for all loans subject to a troubled debt restructuring agreement.

The allowance for loan losses at December 31, 2017 and 2016 was $7.1 million and $6.2 million, or 1.23% and 1.27% of total year end loans, respectively. Net loan charge-offs were $890,000 during 2017, as compared to $412,000 in 2016. The increase in net loan charge-offs were reported in all loan categories and were led principally the result of the charging off of a single, fully reserved-for in prior periods, commercial real estate loan in the amount of $565,000.

For further discussion of our allowance for loan losses procedures, please see "Business-Allowance for Loan Losses" and in Note 6 to the consolidated financial statements contained in this Annual Report on Form 10-K.

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

	2017		2016		2015		2014		2013	
(Dollars in thousands)	Allocation of the Allowance	Percent of Loans to Total Loans	Allocation of the Allowance	Percent of Loans to Total Loans	Allocation of the Allowance	Percent of Loans to Total Loans	Allocation of the Allowance	Percent of Loans to Total Loans	Allocation of the Allowance	Percent of Loans to Total Loans
Residential real estate	$ 865	38.2%	$ 759	42.0%	$ 581	44.0%	$ 509	45.2%	$ 649	49.3%
Commercial real estate	3,589	33.1%	2,935	30.6%	2,983	30.1%	2,801	32.5%	2,302	28.0%
Commercial and tax exempt	1,950	19.2%	2,056	21.0%	1,674	19.3%	1,497	15.3%	1,233	15.3%
Home equity and junior liens	514	4.5%	331	5.1%	350	5.5%	388	5.9%	433	6.2%
Consumer loans	208	4.9%	166	1.3%	118	1.1%	98	1.1%	136	1.2%
Unallocated	-		-		-		56		288	
Total	$ 7,126	100.0%	$ 6,247	100.0%	$ 5,706	100.0%	$ 5,349	100.0%	$ 5,041	100.0%

The following table sets forth the allowance for loan losses for the years indicated and related ratios:

(Dollars In thousands)	2017	2016	2015	2014	2013
Balance at beginning of year	$ 6,247	$ 5,706	$ 5,349	$ 5,041	$ 4,501
Provisions charged to operating expenses	1,769	953	1,350	1,205	1,032
Recoveries of loans previously charged-off:					
Commercial real estate and loans	15	31	48	23	41
Consumer and home equity	46	63	69	52	71
Residential real estate	13	13	40	2	47
Total recoveries	74	107	157	77	159
Loans charged off:					
Commercial real estate and loans	(587)	(69)	(787)	(634)	(319)
Consumer and home equity	(211)	(208)	(129)	(183)	(179)
Residential real estate	(166)	(242)	(234)	(157)	(153)
Total charged-off	(964)	(519)	(1,150)	(974)	(651)
Net charge-offs	(890)	(412)	(993)	(897)	(492)
Balance at end of year	$ 7,126	$ 6,247	$ 5,706	$ 5,349	$ 5,041
Net charge-offs to average loans outstanding	0.16%	0.09%	0.25%	0.25%	0.15%
Allowance for loan losses to year-end loans	1.23%	1.27%	1.33%	1.38%	1.48%

Deposits

The Company’s deposit base is drawn from nine full-service offices in its market area. The deposit base consists of demand deposits, money management and money market deposit accounts, savings, and time deposits. Average deposits increased $116.5 million, or 21.1%, in 2017. For the year ended December 31, 2017, 71.7% of the Company's average deposit base of $670.0 million consisted of core deposits. Core deposits, which exclude time deposits, are considered to be more stable and provide the Company with a lower cost source of funds than time deposits. The Company will continue to emphasize retail and business core deposits by providing depositors with a full range of deposit product offerings and will maintain its recent focus on deposit gathering within the Syracuse market.

At December 31, 2017, consumer deposits, and commercial and business deposits increased $107.7 million and $4.8 million, respectively, partially offset by a decrease in municipal deposits of $2.0 million, when compared to December 31, 2016. The increase in consumer deposits reflects the Bank’s increased market penetration among non-business customers, particularly in northern Onondaga County, driven by the Bank’s focused marketing initiatives. The increase in commercial and business deposits was the result of the Company’s successful execution of its strategy to expand products and services to our existing commercial and business relationships within the markets that we serve.

Total deposits of $723.6 million at December 31, 2017 consisted in part of $94.1 million and $51.1 million in brokered money market and certificate of deposit accounts, respectively. Brokered deposit represented 20.1% of all deposits at December 31, 2017. Total deposits of $611.0 million at December 31, 2016 consisted in part of $86.9 million and $42.8 million in brokered money market and certificate of deposit accounts, respectively. Brokered deposit represented 21.2% of all deposits at December 31, 2016.

At December 31, 2017, time deposits in excess of $100,000 totaled $147.2 million, or 68.9% of time deposits and 20.3% of total deposits. At December 31, 2016, these deposits totaled $130.4 million, or 68.9% of time deposits and 21.4% of total deposits.

The following table indicates the amount of the Company’s certificates of deposit of $100,000 or more by time remaining until maturity as of December 31, 2017:

(In thousands)	
Remaining Maturity:	
Three months or less	$ 55,215
Three through six months	28,715
Six through twelve months	24,498
Over twelve months	38,723
Total	$ 147,151

Borrowings

Short-term borrowings are comprised primarily of advances and overnight borrowing at the FHLBNY. At December 31, 2017 and December 31, 2016 there were $30.6 million and $42.0 million, respectively, in short-term borrowings outstanding.

The following table represents information regarding short-term borrowings during 2017 and 2016.

(Dollars in thousands)	2017	2016
Maximum outstanding at any month end	$ 41,600	$ 65,100
Average amount outstanding during the year	31,268	31,468
Balance at the end of the period	30,600	42,000
Average interest rate during the year	1.34%	0.68%
Average interest rate at the end of the period	1.32%	0.85%

Long-term borrowed funds consist of advances from the FHLBNY. Long-term borrowed funds, totaled $43.3 million at December 31, 2017 as compared to $17.0 million at December 31, 2016.

On October 15, 2015, the Company executed a $10.0 million non-amortizing Subordinated Loan with an unrelated third party that is scheduled to mature on October 1, 2025. The Company has the right to prepay the Subordinated Loan at any time after October 15, 2020 without penalty. The terms of the Subordinated Loan require interest payments at an annual interest rate of 3.50% from October 15, 2015 to February 29, 2016. The annual interest rate charged to the Company increased to 6.25% on March 1, 2016 through the maturity date. The Subordinated Loan is senior in the Company's credit repayment hierarchy only to the Company's common equity and, as a result, qualifies as Tier 2 capital for all future periods when applicable. The Company paid $172,000 in origination and legal fees as part of this transaction. These fees will be amortized over the life of the Subordinated Loan through its first call date using the effective interest method. The effective cost of funds related to this transaction is 6.44% calculated under this method.

Capital

The Company's shareholders' equity increased $3.9 million, or 6.7%, to $61.8 million at December 31, 2017 from $57.9 million at December 31, 2016. Shareholders' equity was increased in 2017 by net income of $3.5 million and stock-based compensation-related increases of $500,000 in additional paid in capital and $367,000 in accretion of unearned ESOP shares. In addition, shareholder's equity was increased in 2017 by $404,000 for decreases in accumulated other comprehensive loss, net of tax. These increases to shareholders' equity in 2017, totaling $4.2 million, were partially offset by common stock dividend distributions of $880,000 paid during the year.

At December 31, 2017, the Company adopted ASU 2018-02 under the early adoption permissibility provisions of that Standard. Accordingly, the Company elected to reclassify to retained earnings in the statement of stockholders' equity the stranded tax effects related to cumulative net unrealized losses on available-for-sale securities in AOCI related to the Tax Act. The Company determined the amount of this adjustment using the portfolio approach as specified in the Standard. The reclassification, as it relates to the Company, encompassed only the change in corporate income tax rates as other potential effects of the Tax Act considered by the provisions of ASU 2018-02 were not considered to be applicable to the Company.

Risk-based capital provides the basis for which all banks are evaluated in terms of capital adequacy. Capital adequacy is evaluated primarily by the use of ratios which measure capital against total assets, as well as against total assets that are weighted based on defined risk characteristics. The Company's goal is to support growth and expansion activities, while maintaining a strong capital position and exceeding regulatory standards. At December 31, 2017, the Bank exceeded all regulatory required minimum capital ratios and met the regulatory definition of a "well-capitalized" institution. See "Supervision and Regulation – Federal Regulations – Capital Requirements."

On February 16, 2016, the Company redeemed all 13,000 shares of the Series B Preferred Stock outstanding with the payment of $13.0 million to the SBLF. This redemption was substantially financed by the issuance of the $10 million Subordinated Loan on October 15, 2015. The issuance of the Subordinated Loan will increase interest expense by $644,000 per year but prospectively reduce the amount payable to the SBLF in preferred stock dividends. Effective April 1, 2016, the annual dividend rate for the preferred stock would have been 9.0%. The retirement of the $13.0 million of the SBLF Preferred Series B stock, therefore, resulted in an annual reduction of preferred dividends payable of $1.2 million. The Company paid $0 and $16,000 in preferred stock dividends in 2017 and 2016, respectively. These transactions had no effect on the regulatory capital position of the Bank.

As a result of the Dodd-Frank Act, the Company's ability to raise new capital through the use of trust preferred securities may be limited because these securities will no longer be included in Tier 1 capital. In addition, our ability to generate or originate additional revenue producing assets may be constrained in the future in order to comply with the new capital standards required by federal regulation that took effect January 1, 2016. See Note 20 to the consolidated financial statements contained herein and the regulation and supervision section within Part I of this Annual Report on Form 10-K for further discussion on regulatory capital requirements.

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

Quantitative measures established by regulation to ensure capital adequacy require the Bank to maintain amounts and ratios of total and Tier 1 capital (as defined in the regulations) to risk-weighted assets (as defined), and of Tier 1 capital (as defined) to average assets (as defined).

As of December 31, 2017, the Bank's most recent notification from the Federal Deposit Insurance Corporation categorized the Bank as "well-capitalized", under the regulatory framework for prompt corrective action. To be categorized as "well-capitalized", the Bank must maintain total risk-based, Tier 1 risk-based and Tier 1 leverage ratios. There are no conditions or events since that notification that management believes have changed the Bank's category.

The regulations also impose a "capital conservation buffer" consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets above the amount necessary to meet its minimum risk-based capital requirements. The buffer is separate from the capital ratios required under the Prompt Corrective Action ("PCA") standards and imposes restrictions on dividend distributions and discretionary bonuses. In order to avoid these restrictions, the capital conservation buffer effectively increases the minimum the following capital to risk-weighted assets ratios: (1) Core Capital, (2) Total Capital and (3) Common Equity. The capital conservation buffer requirement began being phased in beginning January 1, 2016 at 0.625% of risk-weighted assets and increasing each year until fully implemented at 2.5% on January 1, 2019. At December 31, 2017, the Bank exceeded all current and projected regulatory required minimum capital ratios, including the maximum capital buffer level that will be required on January 1, 2019.

LIQUIDITY

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

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

For the year ended December 31, 2017, cash and equivalents decreased by $428,000. The Company reported net cash flows from financing activities of $126.7 million generated principally by an increase in deposits of $112.6 million and an increase in long-term borrowings of $33.2 million, partially offset by a decrease in short-term borrowings of $18.3 million. Additionally, $6.8 million was provided through operating activities. These cash flows were primarily invested in a net increases in loans outstanding of $90.7 million and investment securities of $41.8 million net of proceeds from sales, maturities and principal reductions during 2017.

Certificates of deposit due within one year of December 31, 2017 totaled $146.3 million, representing 68.6% of certificates of deposit at December 31, 2017, an increase from 63.3% at December 31, 2016. We believe the large percentage of certificates of deposit that mature within one year reflect customers' hesitancy to invest their funds for long periods in the current low interest rate environment. If these maturing deposits do not remain with us, we will be required to seek other sources of funds, including other certificates of deposit and borrowings. Depending on market conditions, we may be required to pay higher rates on such deposits or other borrowings than we currently pay on the certificates of deposit due on or before December 31, 2017.

The Company is a separate legal entity from the Bank and must provide for its own liquidity. In addition to its operating expenses, the Company is responsible for paying any dividends declared to its shareholders and making payments on its subordinated loans. The Company may repurchase shares of its common stock. The Company's primary sources of funds are the proceeds it retained from the conversion and offering, interest and dividends on securities and dividends received from the Bank. The amount of dividends that the Bank may declare and pay to the Company in any calendar year, without prior regulatory approval, cannot exceed net income for that year to date plus retained net income (as defined) for the preceding two calendar years. The Company believes that this restriction will not have an impact on the Company's ability to meet its ongoing cash obligations. At December 31, 2017 and 2016, the Company had cash and cash equivalents of $22.0 million and $22.4 million, respectively.

In June 2017, the Bank entered into a $26.0 million Irrevocable Stand-By Letter of Credit ("LOC") with the FHLBNY as another means of collateralizing public funds deposits. This letter of credit is due to expire in June 2018. These LOCs are conditional commitments issued by the FHLBNY to guarantee the performance of the Bank with respect to large public funds deposits. These deposits are placed with the Bank by entities, such as municipalities and other political subdivisions within the Bank's market area, and typically exceed the statutory FDIC deposit insurance limits for individual accounts. As a matter of New York State statute, municipal depositors require that collateral be directly deposited by the Bank with an independent safekeeping agent, or in certain cases, that LOCs be issued by a third party that is acceptable to the depositor. The Bank finds that, with certain depositor relationships, this later method of collateralization for the benefit of the municipal depositors is more economically efficient than posting specific securities with a safekeeping agent. The Bank committed a portion of its mortgage loan portfolio as pledged collateral to the FHLBNY for the LOC. Loans encumbered as collateral for letters of credit reduce the Bank's available liquidity position in that available borrowing capacity with the FHLBNY is decreased substantially on a dollar-for-dollar basis.

The Bank has a number of existing credit facilities available to it. At December 31, 2017, total credit available under the existing lines of credit was approximately $182.4 million at FHLBNY, the FRB, and three other correspondent banks. At December 31, 2017, the Company had $99.9 million of the available lines of credit utilized, including encumbrances supporting the outstanding letters of credit, described above, on its existing lines of credit with the remainder of $82.5 million available.

The Asset Liability Management Committee of the Company is responsible for implementing the policies and guidelines for the maintenance of prudent levels of liquidity. As of December 31, 2017, management reported to the board of directors that the Bank was in compliance with its liquidity policy guidelines.

OFF-BALANCE SHEET ARRANGEMENTS

The Bank is also a party to financial instruments with off-balance sheet risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit and standby letters of credit. At December 31, 2017, the Bank had $126.8 million in outstanding commitments to extend credit and standby letters of credit. See Note 18 within the Notes to Consolidated Financial Statements contained herein.

ITEM 7A: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Not required of a smaller reporting company.

ITEM 8: FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

Index to Consolidated Financial Statements
Pathfinder Bancorp, Inc.

MANAGEMENT'S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

The Company's management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Rules 13a-15(f) and 15d-15(f) of the Securities Exchange Act of 1934, as amended. Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with policies or procedures may deteriorate. The Company's internal control over financial reporting is a process designed under the supervision of the Company's principal executive officer and principal financial officer to provide reasonable assurance regarding the reliability of financial reporting and the preparation of the Company's financial statements for external reporting purposes in accordance with United States generally accepted accounting principles.

Under the supervision and with the participation of management, including the Company's principal executive officer and principal financial officer, the Company conducted an evaluation of the effectiveness of its internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on its evaluation under that framework, management concluded that the Company's internal control over financial reporting was effective as of December 31, 2017. In addition, based on our assessment, management has determined that there were no material weaknesses in the Company's internal controls over financial reporting.

This annual report does not include an attestation report of the Company's independent registered public accounting firm regarding internal control over financial reporting pursuant to the rules of the Dodd-Frank Act that exempts the Company from such attestation and requires only management's report.

/s/ Thomas W. Schneider	/s/ James A. Dowd
Thomas W. Schneider	James A. Dowd
Thomas W. Schneider	James A. Dowd
President and Chief Executive Officer	Executive Vice President, Chief Operating Officer and Chief Financial Officer

Oswego, New York
March 30, 2018

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of
Pathfinder Bancorp, Inc.
Oswego, New York:

Opinion on the Financial Statements

We have audited the accompanying consolidated statements of condition of Pathfinder Bancorp, Inc. and subsidiaries (the "Company") as of December 31, 2017 and 2016 and the related consolidated statements of income, comprehensive income, changes in shareholders' equity and cash flows for each of the years in the two-year period ended December 31, 2017 and the related notes (collectively referred to as the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2016, and the results of its operations and its cash flows for each of the years in the two-year period ended December 31, 2017, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

We have served as the Company's auditor since 2011.

/s/ BONADIO & CO., LLP

Bonadio & Co., LLP
Syracuse, New York
March 30, 2018

Pathfinder Bancorp, Inc.
Consolidated Statements of Condition

(In thousands, except share and per share data)	December 31, 2017	December 31, 2016
ASSETS:		
Cash and due from banks	$ 9,708	$ 6,968
Interest-earning deposits	12,283	15,451
Total cash and cash equivalents	21,991	22,419
Available-for-sale securities, at fair value	171,138	141,955
Held-to-maturity securities, at amortized cost (fair value of $66,426 and $54,429, respectively)	66,196	54,645
Federal Home Loan Bank stock, at cost	3,855	3,250
Loans	580,831	492,147
Less: Allowance for loan losses	7,126	6,247
Loans receivable, net	573,705	485,900
Premises and equipment, net	16,117	15,177
Accrued interest receivable	3,047	2,532
Foreclosed real estate	468	597
Intangible assets, net	182	198
Goodwill	4,536	4,536
Bank owned life insurance	11,742	11,458
Other assets	8,280	6,367
Total assets	$ 881,257	$ 749,034
LIABILITIES AND SHAREHOLDERS' EQUITY:		
Deposits:		
Interest-bearing	$ 633,820	$ 535,701
Noninterest-bearing	89,783	75,282
Total deposits	723,603	610,983
Short-term borrowings	30,600	41,947
Long-term borrowings	43,288	17,000
Subordinated loans	15,059	15,025
Accrued interest payable	186	75
Other liabilities	6,377	5,643
Total liabilities	819,113	690,673
Shareholders' equity:		
Common stock, par value $0.01; 25,000,000 authorized shares; 4,280,227 and 4,236,744 shares outstanding, respectively	43	43
Additional paid in capital	28,170	27,483
Retained earnings	39,020	35,619
Accumulated other comprehensive loss	(4,208)	(3,822)
Unearned ESOP	(1,214)	(1,394)
Total Pathfinder Bancorp, Inc. shareholders' equity	61,811	57,929
Noncontrolling interest	333	432
Total equity	62,144	58,361
Total liabilities and shareholders' equity	$ 881,257	$ 749,034

The accompanying notes are an integral part of the consolidated financial statements.

Pathfinder Bancorp, Inc.
Consolidated Statements of Income

(In thousands, except per share data)	For the year ended December 31, 2017	For the year ended December 31, 2016
Interest and dividend income:		
Loans, including fees	$ 24,392	$ 20,703
Debt securities:		
Taxable	3,598	2,327
Tax-exempt	1,038	865
Dividends	229	134
Federal funds sold and interest earning deposits	156	64
Total interest and dividend income	29,413	24,093
Interest expense:		
Interest on deposits	3,904	2,441
Interest on short-term borrowings	997	301
Interest on long-term borrowings	595	270
Interest on subordinated loans	794	792
Total interest expense	6,290	3,804
Net interest income	23,123	20,289
Provision for loan losses	1,769	953
Net interest income after provision for loan losses	21,354	19,336
Noninterest income:		
Service charges on deposit accounts	1,130	1,141
Earnings and gain on bank owned life insurance	284	307
Loan servicing fees	149	138
Net gains on sales and redemptions of investment securities	489	594
Net gains (losses) on sales of loans and foreclosed real estate	37	(40)
Debit card interchange fees	578	557
Other charges, commissions & fees	1,512	1,486
Total noninterest income	4,179	4,183
Noninterest expense:		
Salaries and employee benefits	11,917	10,772
Building occupancy	2,196	1,936
Data processing	1,779	1,682
Professional and other services	952	834
Advertising	809	730
FDIC assessments	473	345
Audits and exams	353	329
Other expenses	2,709	2,482
Total noninterest expenses	21,188	19,110
Income before income taxes	4,345	4,409
Provision for income taxes	922	1,111
Net income attributable to noncontrolling interest and Pathfinder Bancorp, Inc.	3,423	3,298
Net (loss) income attributable to noncontrolling interest	(68)	26
Net income attributable to Pathfinder Bancorp Inc.	3,491	3,272
Preferred stock dividends	-	16
Net income available to common shareholders	**$ 3,491**	**$ 3,256**
Earnings per common share - basic	**$ 0.86**	**$ 0.79**
Earnings per common share - diluted	**$ 0.83**	**$ 0.78**
Dividends per common share	**$ 0.215**	**$ 0.200**

The accompanying notes are an integral part of the consolidated financial statements.

Pathfinder Bancorp, Inc.
Consolidated Statements of Comprehensive Income

(In thousands)	Years Ended December 31, 2017		Years Ended December 31, 2016	
Net Income	$	3,423	$	3,298
Other Comprehensive Loss				
Retirement Plans:				
Retirement plan net losses recognized in plan expenses		150		222
Plan (losses) gains not recognized in plan expenses		(631)		330
Net unrealized (loss) gain on retirement plans		(481)		552
Unrealized holding gains on financial derivative:				
Change in unrealized holding gains on financial derivative		-		2
Reclassification adjustment for interest expense included in net income		-		25
Net unrealized gain on financial derivative		-		27
Unrealized holding gains (losses) on available for sale securities				
Unrealized holding gains (losses) arising during the period		1,454		(2,394)
Reclassification adjustment for net gains included in net income		(489)		(594)
Net unrealized gain (loss) on available for sale securities		965		(2,988)
Accretion of net unrealized loss on securities transferred to held-to-maturity(1)		191		316
Other comprehensive income (loss), before tax		675		(2,093)
Tax effect		(271)		836
Other comprehensive income (loss), net of tax		404		(1,257)
Comprehensive income	$	3,827	$	2,041
Comprehensive (loss) income, attributable to noncontrolling interest	$	(68)	$	26
Comprehensive income attributable to Pathfinder Bancorp, Inc.	$	3,895	$	2,015
Tax Effect Allocated to Each Component of Other Comprehensive Loss				
Retirement plan net losses recognized in plan expenses	$	(61)	$	(87)
Plan (losses) gains not recognized in plan expenses		252		(134)
Change in unrealized holding gains on financial derivative		-		(1)
Reclassification adjustment for interest expense included in net income		-		(10)
Unrealized holding gains (losses) arising during the period		(582)		958
Reclassification adjustment for net gains included in net income		196		236
Accretion of net unrealized loss on securities transferred to held-to-maturity(1)		(76)		(126)
Income tax effect related to other comprehensive income	$	(271)	$	836

(1) The accretion of the unrealized holding losses in accumulated other comprehensive loss at the date of transfer at September 30, 2013 partially offsets the amortization of the difference between the par value and the fair value of the investment securities at the date of transfer, and is an adjustment of yield.

The accompanying notes are an integral part of the consolidated financial statements.

Pathfinder Bancorp, Inc.
Consolidated Statements of Changes in Shareholders' Equity
Years ended December 31, 2017 and December 31, 2016

(In thousands, except share and per share data)	Preferred Stock	Common Stock	Additional Paid in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Unearned ESOP	Non-controlling Interest	Total
Balance, January 1, 2017	$ -	$ 43	$ 27,483	$ 35,619	$ (3,822)	$ (1,394)	$ 432	$ 58,361
Net income (loss)	-	-	-	3,491	-	-	(68)	3,423
Other comprehensive income, net of tax	-	-	-	-	404	-	-	404
ESOP shares earned (24,442 shares)	-	-	187	-	-	180	-	367
Restricted stock awards (15,720 shares)	-	-	-	-	-	-	-	-
Stock based compensation	-	-	345	-	-	-	-	345
Stock options exercised	-	-	155	-	-	-	-	155
Common stock dividends declared ($0.215 per share)	-	-	-	(880)	-	-	-	(880)
Reclassification of effect of tax rate change(1)	-	-	-	790	(790)	-	-	-
Distributions from affiliates	-	-	-	-	-	-	(31)	(31)
Balance, December 31, 2017	$ -	$ 43	$ 28,170	$ 39,020	$ (4,208)	$ (1,214)	$ 333	$ 62,144
Balance, January 1, 2016	$ 13,000	$ 44	$ 28,717	$ 33,183	$ (2,565)	$ (1,574)	$ 424	$ 71,229
Net income	-	-	-	3,272	-	-	26	3,298
Other comprehensive loss, net of tax	-	-	-	-	(1,257)	-	-	(1,257)
Preferred stock redemption (13,000 shares)	(13,000)	-	-	-	-	-	-	(13,000)
Preferred stock dividends - SBLF	-	-	-	(16)	-	-	-	(16)
ESOP shares earned (18,332 shares)	-	-	113	-	-	180	-	293
Stock based compensation	-	-	264	-	-	-	-	264
Stock options exercised	-	-	143	-	-	-	-	143
Purchase of common stock shares (143,400)	-	(1)	(1,754)	-	-	-	-	(1,755)
Common stock dividends declared ($0.20 per share)	-	-	-	(820)	-	-	-	(820)
Distributions from affiliates	-	-	-	-	-	-	(18)	(18)
Balance, December 31, 2016	$ -	$ 43	$ 27,483	$35,619	$ (3,822)	$ (1,394)	$ 432	$58,361

(1) Reclassification from accumulated other comprehensive loss to retained earnings for stranded tax effects resulting from the newly enacted Federal corporate income tax rate reduction from 34% to 21%.

The accompanying notes are an integral part of the consolidated financial statements.

Pathfinder Bancorp, Inc.
Consolidated Statements of Cash Flows

	For the Years ended December 31,	
(In thousands)	2017	2016
OPERATING ACTIVITIES		
Net income attributable to Pathfinder Bancorp, Inc.	$ 3,491	$ 3,272
Adjustments to reconcile net income to net cash flows from operating activities:		
Provision for loan losses	1,769	953
Deferred income tax (benefit)	(100)	(249)
Proceeds from sale of loans	53	202
Originations of loans held-for-sale	(53)	(197)
Realized (gains) losses on sales, redemptions and calls of:		
Real estate acquired through foreclosure	(31)	50
Loans	(6)	(10)
Available-for-sale investment securities	(29)	(456)
Held-to-maturity investment securities	(32)	(53)
Depreciation	1,035	1,019
Amortization of mortgage servicing rights	28	12
Amortization of deferred loan costs	322	222
Amortization of deferred financing from subordinated debt	34	34
Earnings and gain on bank owned life insurance	(284)	(307)
Net amortization of premiums and discounts on investment securities	1,678	1,211
Amortization of intangible assets	16	16
Stock based compensation and ESOP expense	712	557
Net change in accrued interest receivable	(515)	(479)
Net change in other assets and liabilities	(1,246)	574
Net cash flows from operating activities	6,842	6,371
INVESTING ACTIVITIES		
Purchase of investment securities available-for-sale	(132,748)	(145,264)
Purchase of investment securities held-to-maturity	(21,449)	(16,859)
Net (purchases of) proceeds of Federal Home Loan Bank stock	(605)	(826)
Proceeds from maturities and principal reductions of investment securities available-for-sale	38,262	68,506
Proceeds from maturities and principal reductions of investment securities held-to-maturity	7,080	3,659
Proceeds from sales, redemptions and calls of:		
Available-for-sale investment securities	65,010	30,228
Held-to-maturity investment securities	2,635	3,000
Real estate acquired through foreclosure	993	279
Realized gains on hedging activity	(428)	(85)
Net change in loans	(90,718)	(62,733)
Purchase of premises and equipment	(1,975)	(1,362)
Net cash flows from investing activities	(133,943)	(121,457)
FINANCING ACTIVITIES		
Net change in demand deposits, NOW accounts, savings accounts, money management deposit accounts, MMDA accounts and escrow deposits	92,470	57,830
Net change in time deposits	18,329	28,594
Net change in brokered deposits	1,821	34,244
Net change in short-term borrowings	(11,347)	17,147
Payments on long-term borrowings	(7,000)	(3,000)
Proceeds from long-term borrowings	33,228	3,500
Repayment of loan on cash surrender value of bank owned life insurance	-	(536)
Redemption of preferred stock - SBLF	-	(13,000)
Purchase of common stock	-	(1,755)
Proceeds from exercise of stock options	155	143
Cash dividends paid to preferred shareholder - SBLF	-	(49)
Cash dividends paid to common shareholders	(884)	(866)
Change in noncontrolling interest, net	(99)	8
Net cash flows from financing activities	126,673	122,260
Change in cash and cash equivalents	(428)	7,174
Cash and cash equivalents at beginning of period	22,419	15,245
Cash and cash equivalents at end of period	$ 21,991	$ 22,419
CASH PAID DURING THE PERIOD FOR:		
Interest	$ 6,179	$ 3,928
Income taxes	945	970
NON-CASH INVESTING ACTIVITY		
Real estate acquired in exchange for loans	822	390

The accompanying notes are an integral part of the consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1: SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Nature of Operations

The accompanying consolidated financial statements include the accounts of Pathfinder Bancorp, Inc. (the “Company”) and its wholly owned subsidiary, Pathfinder Bank (the “Bank”). The Company is a Maryland corporation headquartered in Oswego, New York. On October 16, 2014, the Company completed its conversion from the mutual holding company structure and the related public offering and is now a stock holding company that is fully owned by the public. As a result of the conversion, the mutual holding company and former mid-tier holding company were merged into Pathfinder Bancorp, Inc. The primary business of the Company is its investment in Pathfinder Bank (the "Bank") which is 100% owned by the Company. The Company sold 2,636,053 shares of common stock in the offering, including 105,442 shares sold to the Pathfinder Bank employee stock ownership plan (“ESOP”). All shares were sold at a price of $10.00 per share raising $26.4 million in gross proceeds. Additionally, $197,000 in cash was received from the merger of MHC into the company; and after accounting for conversion related expenses of $1.5 million, the Company received $24.9 million in net proceeds. Concurrent with the completion of the offering, publicly owned shares of Pathfinder Bancorp, Inc., a federal corporation, were exchanged for 1.6472 shares of the Company’s common stock. At December 31, 2017, 4,280,227 shares of common stock were outstanding. The Bank has two wholly owned operating subsidiaries, Pathfinder Risk Management Company, Inc. (“PRMC”) and Whispering Oaks Development Corp. All significant inter-company accounts and activity have been eliminated in consolidation. Although the Company owns, through its subsidiary PRMC, 51% of the membership interest in FitzGibbons Agency, LLC (“FitzGibbons”), the Company is required to consolidate 100% of FitzGibbons within the consolidated financial statements. The 49% of which the Company does not own is accounted for separately as noncontrolling interests within the consolidated financial statements.

The Company has seven branch offices located in Oswego County and two branch offices in Onondaga County and one loan production office in Oneida County. The Company is primarily engaged in the business of attracting deposits from the general public in the Company’s market area, and investing such deposits, together with other sources of funds, in loans secured by commercial real estate, business assets, one-to-four family residential real estate and investment securities.

Use of Estimates in the Preparation of Consolidated Financial Statements

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Management has identified the allowance for loan losses, deferred income taxes, pension obligations, the annual evaluation of the Company’s goodwill for possible impairment and the evaluation of investment securities for other than temporary impairment and the estimation of fair values for accounting and disclosure purposes to be the accounting areas that require the most subjective and complex judgments, and as such, could be the most subject to revision as new information becomes available.

The Company is subject to the regulations of various governmental agencies. The Company also undergoes periodic examinations by the regulatory agencies which may subject it to further changes with respect to asset valuations, amounts of required loss allowances, and operating restrictions resulting from the regulators' judgments based on information available to them at the time of their examinations.

Significant Group Concentrations of Credit Risk

Most of the Company’s activities are with customers located primarily in Oswego and Onondaga counties of New York State. A large portion of the Company’s portfolio is centered in residential and commercial real estate. The Company closely monitors real estate collateral values and requires additional reviews of commercial real estate appraisals by a qualified third party for commercial real estate loans in excess of $400,000. All residential loan appraisals are reviewed by an individual or third party who is independent of the loan origination or approval process and was not involved in the approval of appraisers or selection of the appraiser for the transaction, and has no direct or indirect interest, financial or otherwise in the property or the transaction. Note 4 discusses the types of securities that the Company invests in. Note 5 discusses the types of lending that the Company engages in. The Company does not have any significant concentrations to any one industry or customer.

Advertising

The Company follows the policy of charging the costs of advertising to expense as incurred.

Noncontrolling Interest

Noncontrolling interest represents the portion of ownership and profit or loss that is attributable to the minority owners of the FitzGibbons Agency.

Cash and Cash Equivalents

Cash and cash equivalents include cash on hand, amounts due from banks and interest-bearing deposits (with original maturity of three months or less).

Investment Securities

The Company classifies investment securities as either available-for-sale or held-to-maturity. The Company does not hold any securities considered to be trading. Available-for-sale securities are reported at fair value, with net unrealized gains and losses reflected as a separate component of shareholders' equity, net of the applicable income tax effect. Held-to-maturity securities are those that the Company has the ability and intent to hold until maturity and are reported at amortized cost.

Gains or losses on investment security transactions are based on the amortized cost of the specific securities sold. Premiums and discounts on securities are amortized and accreted into income using the interest method over the period to maturity.

Note 4 to the consolidated financial statements includes additional information about the Company's accounting policies with respect to the impairment of investment securities.

Federal Home Loan Bank Stock

Federal law requires a member institution of the Federal Home Loan Bank ("FHLB") system to hold stock of its district FHLB according to a predetermined formula. The stock is carried at cost.

Transfers of Financial Assets

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

Loans

The Company grants mortgage, commercial, municipal, and consumer loans to customers. Loans that management has the intent and ability to hold for the foreseeable future or until maturity or pay-off are stated at their outstanding unpaid principal balances, less the allowance for loan losses plus net deferred loan origination costs. The ability of the Company's debtors to honor their contracts is dependent upon the real estate and general economic conditions in the market area. Interest income is generally recognized when income is earned using the interest method. Nonrefundable loan fees received and related direct origination costs incurred are deferred and amortized over the life of the loan using the interest method, resulting in a constant effective yield over the loan term. Deferred fees are recognized into income and deferred costs are charged to income immediately upon prepayment of the related loan.

The loans receivable portfolio is segmented into residential mortgage, commercial and consumer loans. The residential mortgage segment consists of one-to-four family first-lien residential mortgages and construction loans. Commercial loans consist of the following classes: real estate, lines of credit, other commercial and industrial, and tax-exempt loans. Consumer loans include both home equity lines of credit and loans with junior liens and other consumer loans.

Allowance for Loan Losses

The allowance for loan losses represents management's estimate of losses inherent in the loan portfolio as of the date of the statement of condition and it is recorded as a reduction of loans. The allowance is increased by the provision for loan losses, and decreased by charge-offs, net of recoveries. Loans deemed to be uncollectible are charged against the allowance for loan losses, and subsequent recoveries, if any, are credited to the allowance. All, or part, of the principal balance of loans receivable are charged off to the allowance as soon as it is determined that the repayment of all, or part, of the principal balance is highly unlikely. Non-residential consumer loans are generally charged off no later than 120 days past due on a contractual basis, unless productive collection efforts are providing results. Consumer loans may be charged off earlier in the event of bankruptcy, or if there is an amount that is deemed uncollectible. No portion of the allowance for loan losses is restricted to any individual loan product and the entire allowance is available to absorb any and all loan losses.

The allowance for loan losses is maintained at a level considered adequate to provide for losses that can be reasonably anticipated. Management performs a quarterly evaluation of the adequacy of the allowance. The allowance is based on three major components which are; specific components for larger loans, recent historical losses and several qualitative factors applied to a general pool of loans, and an unallocated component.

The first component is the specific component that relates to loans that are classified as impaired. For these loans, an allowance is established when the discounted cash flows or collateral value of the impaired loan is lower than the carrying value of that loan.

The second or general component covers pools of loans, by loan class, not considered impaired, smaller balance homogeneous loans, such as residential real estate, home equity and other consumer loans. These pools of loans are evaluated for loss exposure first based on historical loss rates for each of these categories of loans. The ratio of net charge-offs to loans outstanding within each product class, over the most recent eight quarters, lagged by one quarter, is used to generate the historical loss rates. In addition, qualitative factors are added to the historical loss rates in arriving at the total allowance for loan loss need for this general pool of loans. The qualitative factors include changes in national and local economic trends, the rate of growth in the portfolio, trends of delinquencies and nonaccrual balances, changes in loan policy, and changes in lending management experience and related staffing. Each factor is assigned a value to reflect improving, stable or declining conditions based on management's best judgment using relevant information available at the time of the evaluation. These qualitative factors, applied to each product class, make the evaluation inherently subjective, as it requires material estimates that may be susceptible to significant revision as more information becomes available. Adjustments to the factors are supported through documentation of changes in conditions in a narrative accompanying the allowance for loan loss analysis and calculation.

The third or unallocated component is maintained to cover uncertainties that could affect management's estimate of probable losses. The unallocated component of the allowance reflects the margin of imprecision inherent in the underlying assumptions used in the methodologies for estimating specific and general losses in the portfolio and generally comprises less than 10% of the total allowance for loan loss.

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

An allowance for loan loss is established for an impaired loan if its carrying value exceeds its estimated fair value. The estimated fair values of substantially all of the Company's impaired loans are measured based on the estimated fair value of the loan's collateral. For loans secured by real estate, estimated fair values are determined primarily through third-party appraisals, less costs to sell. Appraised values are discounted to arrive at the estimated selling price of the collateral, which is considered to be the estimated fair value. The discounts also include estimated costs to sell the property.

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

Large groups of homogeneous loans are collectively evaluated for impairment. Accordingly, the Company does not separately identify individual residential mortgage loans less than $300,000, home equity and other consumer loans for impairment disclosures, unless such loans are related to borrowers with impaired commercial loans or they are subject to a troubled debt restructuring agreement. Loans that are related to borrowers with impaired commercial loans or are subject to a troubled debt restructuring agreement are evaluated individually for impairment. .

Commercial loans whose terms are modified are classified as troubled debt restructurings if the Company grants such borrowers concessions and it is deemed that those borrowers are experiencing financial difficulty. Concessions granted under a troubled debt restructuring generally include but are not limited to a temporary reduction in the interest rate or an extension of a loan's stated maturity date. Commercial loans classified as troubled debt restructurings are designated as impaired and evaluated individually as discussed above.

The allowance calculation methodology includes further segregation of loan classes into risk rating categories. The borrower's overall financial condition, repayment sources, guarantors and value of the collateral, if appropriate, are evaluated not less than annually for commercial loans or when credit deficiencies arise on all loans. Credit quality risk ratings include regulatory classifications of special mention, substandard, doubtful and loss. See Note 5 for a description of these regulatory classifications.

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

Income Recognition on Impaired and Nonaccrual Loans

For all classes of loans receivable, the accrual of interest is discontinued when the contractual payment of principal or interest has become 90 days past due or management has serious doubts about further collectability of principal or interest, even though the loan may be currently performing. A loan may remain on accrual status if it is either well secured or guaranteed and in the process of collection. When a loan is placed on nonaccrual status, unpaid interest is reversed and charged to interest income. Interest received on nonaccrual loans, including impaired loans, generally is either applied against principal or reported as interest income, according to management's judgment as to the collectability of principal. Generally, loans are restored to accrual status when the obligation is brought current, has performed in accordance with the contractual terms for a reasonable period of time, generally six months, and the ultimate collectability of the total contractual principal and interest is no longer in doubt. Nonaccrual troubled debt restructurings are restored to accrual status if principal and interest payments, under the modified terms, are current for six consecutive months after modification.

For nonaccrual loans, when future collectability of the recorded loan balance is expected, interest income may be recognized on a cash basis. In the case where a nonaccrual loan had been partially charged off, recognition of interest on a cash basis is limited to that which would have been recognized on the recorded loan balance at the contractual interest rate. Cash interest receipts in excess of that amount are recorded as recoveries to the allowance for loan losses until prior charge-offs have been fully recovered.

Off-Balance Sheet Credit Related Financial Instruments

In the ordinary course of business, the Company has entered into commitments to extend credit, including commitments under standby letters of credit. Such financial instruments are recorded when they are funded.

Premises and Equipment

Premises and equipment are stated at cost, less accumulated depreciation. Depreciation is computed on a straight-line basis over the estimated useful lives of the related assets, ranging up to 40 years for premises and 10 years for equipment. Maintenance and repairs are charged to operating expenses as incurred. The asset cost and accumulated depreciation are removed from the accounts for assets sold or retired and any resulting gain or loss is included in the determination of income.

Foreclosed Real Estate

Physical possession of residential real estate property collateralizing a residential mortgage loan occurs when legal title is obtained upon completion of foreclosure or when the borrower conveys all interest in the property to satisfy the loan through completion of a deed-in-lieu of foreclosure or through a similar legal agreement. Properties acquired through foreclosure, or by deed-in-lieu of foreclosure, are recorded at their fair value less estimated costs to sell. Fair value is typically determined based on evaluations by third parties. Costs incurred in connection with preparing the foreclosed real estate for disposition are capitalized to the extent that they enhance the overall fair value of the property. Any write-downs on the asset's fair value less costs to sell at the date of acquisition are charged to the allowance for loan losses. Subsequent write downs and expenses of foreclosed real estate are included as a valuation allowance and recorded in noninterest expense.

Goodwill and Intangible Assets

Goodwill represents the excess cost of an acquisition over the fair value of the net assets acquired. Goodwill is not amortized, but is evaluated annually for impairment. Intangible assets, such as customer relationships, are amortized over their useful lives, generally 15 years.

Mortgage Servicing Rights

Originated mortgage servicing rights are recorded at their fair value at the time of transfer of the related loans and are amortized in proportion to, and over the period of, estimated net servicing income or loss. The carrying value of the originated mortgage servicing rights is periodically evaluated for impairment or between annual evaluations under certain circumstances.

Stock-Based Compensation

Compensation costs related to share-based payment transactions are recognized based on the grant-date fair value of the stock-based compensation issued. Compensation costs are recognized over the period that an employee provides service in exchange for the award. Compensation costs related to the Employee Stock Ownership Plan are dependent upon the average stock price and the shares committed to be released to plan participants through the period in which income is reported.

Retirement Benefits

The Company has a non-contributory defined benefit pension plan that covered substantially all employees. On May 14, 2012, the Company informed its employees of its decision to freeze participation and benefit accruals under the plan, primarily to reduce some of the volatility in earnings that can accompany the maintenance of a defined benefit plan. The plan was frozen on June 30, 2012. Compensation earned by employees up to June 30, 2012 is used for purposes of calculating benefits under the plan but there will be no future benefit accruals after this date. Participants as of June 30, 2012 will continue to earn vesting credit with respect to their frozen accrued benefits as they continue to work. Pension expense under these plans is charged to current operations and consists of several components of net pension cost based on various actuarial assumptions regarding future experience under the plans.

Gains and losses, prior service costs and credits, and any remaining transition amounts that have not yet been recognized through net periodic benefit cost are recognized in accumulated other comprehensive loss, net of tax effects, until they are amortized as a component of net periodic cost. Plan assets and obligations are measured as of the Company’s statement of condition date.

The Company has unfunded deferred compensation and supplemental executive retirement plans for selected current and former employees and officers that provide benefits that cannot be paid from a qualified retirement plan due to Internal Revenue Code restrictions. These plans are nonqualified under the Internal Revenue Code, and assets used to fund benefit payments are not segregated from other assets of the Company, therefore, in general, a participant's or beneficiary's claim to benefits under these plans is as a general creditor.

The Bank sponsors an Employee Stock Ownership Plan (“ESOP”) covering substantially all full time employees. The cost of shares issued to the ESOP but not committed to be released to the participants is presented in the consolidated statement of condition as a reduction of shareholders’ equity. ESOP shares are released to the participants on an annual basis in accordance with a predetermined schedule. The Company records ESOP compensation expense based on the shares committed to be released and allocated to the participant’s accounts multiplied by the average share price of the Company’s stock over the period. Dividends related to unallocated shares are recorded as compensation expense.

Derivative Financial Instruments

Derivatives are recorded on the statement of condition as assets and liabilities measured at their fair value. The accounting for increases and decreases in the value of derivatives depends upon the use of derivatives and whether the derivatives qualify in whole or in part for the provisions of hedge accounting. The Company had one interest rate swap, which has been determined to be a cash flow hedge that expired in 2016 and was not renewed. The fair value of cash-flow hedging instruments (“Cash Flow Hedge”) are recorded in either other assets or other liabilities. On an ongoing basis, the statement of condition is adjusted to reflect the then current fair value of the Cash Flow Hedge. The related gains or losses are reported in other comprehensive income (loss) and are subsequently reclassified into earnings, as a yield adjustment in the same period in which the related interest on the hedged item (primarily a variable-rate debt obligation) affects earnings. To the extent that the Cash Flow Hedge is not effective, the ineffective portion of the Cash Flow Hedge is immediately recognized as interest expense.

As a hedge against rising short-term interest rates, the Company sold a series of U.S. Treasury securities in the amount of $40 million during 2017. The Company was in controlling possession of, but did not own, the securities which had been received as collateral, under industry-standard repurchase agreements, for a corresponding series of 30-day loans of approximately $40 million on each occurrence to an unrelated third party at market rates of interest. The sale of these securities provided the funds necessary to advance the loan to the third party and placed the Company in what is generally described as a “short position” with respect to the sold U.S. Treasury securities. This transaction acted as a hedge against rising short-term interest rates because the price of the sold securities would be expected to decline in a rising short-term interest rate environment and could be subsequently re-acquired at the conclusion of the 30-day loan period at a price lower than the price at which it was originally sold. Short-term rates generally rose during the successive 30-day loan periods and, consequently, the Company recognized gains on the sale of those securities in the amount of $428,000 when the Treasury securities were repurchased.

In 2016 the Company sold a U.S. Treasury security in the amount of $25 million which had been received as collateral, under an industry-standard repurchase agreement, for a 30-day loan of approximately $25 million to an unrelated third party, at no interest. The sale of this security provided the funds necessary to advance the loan to the third party and placed the Company in what is generally described as a “short position” with respect to the sold U.S. Treasury securities. Short-term rates rose during the 30-day loan periods and, consequently, the Company recognized a gain on the sale of the security in the amount of $85,000.

The hedge positions were closed on December 31, 2017 and 2016.

Income Taxes

Provisions for income taxes are based on taxes currently payable or refundable and deferred income taxes on temporary differences between the tax basis of assets and liabilities and their reported amounts in the consolidated financial statements. Deferred tax assets and liabilities are reported in the consolidated financial statements at currently enacted income tax rates applicable to the period in which the deferred tax assets and liabilities are expected to be realized or settled.

On December 22, 2017 the Tax Act was signed into law. The Tax Act instituted significant changes to various sections of the Internal Revenue Code that effects the Company. Most notably, the Tax Act reduces the Company’s marginal federal income tax rate from 34% to 21% starting January 1, 2018. Generally Accepted Accounting Principles (“GAAP”) requires that the impact of the provisions of the Tax Act be accounted for in the period of enactment. Accordingly, the Company recorded an income tax benefit in the fourth quarter of 2017 related to the Tax Act in the amount of $155,000. The reduction in income tax expense was largely attributable to the reduction in the value of net deferred tax assets and liabilities reflecting lower future tax obligations resulting from the Tax Act’s enacted lower federal corporate tax rate.

Earnings Per Share

Basic earnings per common share are computed by dividing net income, after preferred stock dividends and preferred stock discount accretion, by the weighted average number of common shares outstanding throughout each year. Diluted earnings per share gives effect to weighted average shares that would be outstanding assuming the exercise of issued stock options using the treasury stock method. Unallocated shares of the Company’s ESOP plan are not included when computing earnings per share until they are committed to be released.

Segment Reporting

The Company has evaluated the activities relating to its strategic business units. The controlling interest in the FitzGibbons Agency is dissimilar in nature and management when compared to the Company’s other strategic business units which are judged to be similar in nature and management. The Company has determined that the FitzGibbons Agency is below the reporting threshold in size in accordance with Accounting Standards Codification 280. Accordingly, the Company has determined it has no reportable segments.

Comprehensive Income (Loss)

Accounting principles generally require that recognized revenue, expenses, gains and losses be included in net income. Although certain changes in assets and liabilities are reported as a separate component of the equity section of the statement of condition, such items, along with net income, are components of comprehensive income.

Accumulated other comprehensive loss represents the sum of these items, with the exception of net income, as of the balance sheet date and is represented in the table below.

	As of December 31,	
Accumulated Other Comprehensive Loss By Component:	2017	2016
Unrealized loss for pension and other postretirement obligations	$ (3,003)	$ (2,520)
Tax effect	783	1,007
Net unrealized loss for pension and other postretirement obligations	(2,220)	(1,513)
Unrealized loss on available-for-sale securities	(2,108)	(3,072)
Tax effect	550	1,227
Net unrealized loss on available-for-sale securities	(1,558)	(1,845)
Unrealized loss on securities transferred to held-to-maturity	(585)	(774)
Tax effect	155	310
Net unrealized loss on securities transferred to held-to-maturity	(430)	(464)
Accumulated other comprehensive loss	$ (4,208)	$ (3,822)

(1) Reclassification from accumulated other comprehensive loss to retained earnings for stranded tax effects resulting from the newly enacted Federal corporate income tax rate reduction from 34% to 21%.

Reclassifications

Certain amounts in the 2016 consolidated financial statements have been reclassified to conform to the current year presentation. These reclassifications had no effect on net income as previously reported.

NOTE 2: NEW ACCOUNTING PRONOUNCEMENTS

The following Table provides a description of accounting standards that were adopted in 2017 as well as standards that are currently effective but could have an impact on the Company's consolidated financial statements upon adoption.

Standard	**Description**	**Required Date of Implementation**	**Effect on Consolidated Financial Statements**
Standards Adopted in 2017			
Improvements to Employee Share-Based Payment Accounting (*ASU 2016-09: Compensation—Stock Compensation [Topic 718]: Improvements to Employee Share-Based Payment Accounting*)	The amended guidance requires that all excess tax benefits and tax deficiencies related to share-based compensation be recognized in income tax expense in the income statement and that such amounts be recognized in the period in which the tax deduction arises or in the period in which an expiration of an award occurs.	January 1, 2017	The adoption of this guidance resulted in a $37,000 reduction of income tax expense for the year ended December 31, 2017 that under previous accounting guidance would have been recognized directly in shareholders' equity.
Simplifying the Transition to Equity Method of Accounting (*ASU 2016-07: Investments—Equity Method and Joint Ventures [Topic 323]: Simplifying the Transition to the Equity Method of Accounting*)	The amended guidance eliminates the requirement that an investor retroactively apply the equity method of accounting as a result of an increase in the level of ownership interest or degree of influence. The amended guidance instead requires the investor to adopt the equity method of accounting as of the date the investment first qualifies for such accounting.	January 1, 2017	The adoption of this guidance did not have a material effect on the Company's consolidated financial position or results of operations.
Derivatives and Hedging Amendments *(ASU 2016-05: Derivatives and Hedging [Topic 815]: Effect of Derivative Contract Novations on Existing Hedge Accounting Relationships*)	One amendment clarifies that a change in the counterparty to a derivative instrument that has been designated as the hedging instrument does not, in and of itself, require dedesignation of that hedging relationship provided that all other hedge accounting criteria continue to be met. A second amendment clarifies the requirements for assessing whether contingent call (put) options that can accelerate the payment of principal on debt instruments are clearly and closely related to their debt hosts.	January 1, 2017	The adoption of this guidance did not have a material effect on the Company's consolidated financial position or results of operations.
Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income (*ASU 2018-02: Income Statement—Reporting Comprehensive Income [Topic 220]: Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income)*	The amended guidance allows a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the newly enacted federal corporate income tax rate. The amount of reclassification would be the difference between the historical corporate income tax and the new enacted 21 percent corporate income tax rate.	January 1, 2018 (Early adoption permitted)	The Company early adopted the amended guidance following enactment of the Tax Act in 2017. The adoption of this guidance resulted in a $790,000 reclassification from AOCI to retained earnings.

Standard	Description	Required Date of Implementation	Effect on Consolidated Financial Statements
Standards Not Yet Adopted as of December 31, 2017			
Revenue from Contracts with Customers (*ASU 2014-09: Revenue from Contracts with Customers [Topic 606]*)	The core principle of the accounting guidance is that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services.	January 1, 2018	The Company adopted the revenue recognition guidance effective January 1, 2018, and expects to apply the modified retrospective approach for reporting purposes. A significant amount of the Company's revenues are derived from net interest income on financial assets and liabilities, which are excluded from the scope of the amended guidance. With respect to noninterest income, under the new guidance credit card interchange revenue will be presented net of rewards expense in other revenues from operations. For the years ended December 31, 2017 and 2016, The Company recognized $94,000 and $111,000, respectively, of credit card rewards expense in other costs of operations. The adjustment to beginning retained earnings as well as the impact of any changes in the timing of revenue recognition of noninterest income items within the scope of this guidance will not be material to the Company's financial position or results of operations.
Recognition and Measurement of Financial Assets and Financial Liabilities (*ASU 2016-01: Financial Instruments—Overall [Subtopic 825-10]: Recognition and Measurement of Financial Assets and Financial Liabilities*)	The amended guidance requires equity investments (excluding those accounted for under the equity method of accounting or those that result in consolidation of the investee) be measured at fair value with changes in fair value recognized in net income, public entities to use the exit price when measuring the fair value of financial instruments for disclosure purposes, and an entity to present separately in other comprehensive income a change in the instrument-specific credit risk when the entity has elected to measure a liability at fair value in accordance with the fair value option.	January 1, 2018	The Company held marketable equity securities with a fair value of $515,000 in its available-for-sale portfolio at December 31, 2017. Effective January 1, 2018, fair value changes in such equity securities will be recognized in the consolidated statement of income as opposed to AOCI where they had been recognized under previous accounting guidance. Although those securities have historically fluctuated in value, how those securities could change in value in the future is not predictable.
Improvements to Accounting for Hedging Activities (*ASU 2017-12: Derivatives and Hedging [Topic 815]: Targeted Improvements to Accounting for Hedging Activities*)	The amended guidance expands and clarifies hedge accounting for nonfinancial and financial risk components, aligns the recognition and presentation of the effects of the hedging instrument and hedged item in the financial statements, and simplifies the requirements for assessing effectiveness in a hedging relationship.	January 1, 2019 (Early adoption permitted)	The Company adopted the amended guidance on January 1, 2018 and does not expect such adoption will have a material impact on its consolidated financial statements.

Standard	**Description**	**Required Date of Implementation**	**Effect on Consolidated Financial Statements**
Standards Not Yet Adopted as of December 31, 2017			
Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost (*ASU 2017-07: Compensation — Retirement Benefits [Topic 715] Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost*)	The amended guidance requires the service cost component of the net periodic pension cost and net periodic postretirement benefit cost to be reported in the same line item in the income statement as other compensation costs arising from services rendered by the pertinent employees during the period. The amendments also require that the other components of net benefit costs be presented separately from the service cost component.	January 1, 2018	The Company adopted the new reporting requirements effective January 1, 2018. The Company has previously reported all of its net periodic pension and postretirement benefit costs in salaries and employee benefits within the consolidated statement of income. Information about net periodic pension and postretirement benefit costs that were not service cost-related is included in Note 14.
Scope of Modification Accounting for Share-Based Payment Awards (*ASU 2016-09: Compensation — Stock Compensation [Topic 718]: Improvements to Employee Share-Based Payment Accounting*)	The amended guidance addresses which changes to the terms and conditions of a share-based payment award require an entity to apply modification accounting.	January 1, 2018	The Company adopted the amended guidance on January 1, 2018. The guidance is to be applied on a prospective basis for awards modified on or after the adoption date.
Restricted Cash (*ASU 2016-18: Statements of Cash Flows [Topic 230]: Restricted Cash*)	The amended guidance requires that restricted cash and restricted cash equivalents be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. In addition, when cash, cash equivalents, and restricted cash or restricted cash equivalents are presented in more than one line item within the statement of financial position, the line items and amounts must be presented on the face of the statement of cash flows or disclosed in the notes to the financial statements. Information about the nature of restrictions on an entity’s cash and cash equivalents must also be disclosed.	January 1, 2018	The guidance will be applied using a retrospective transition method beginning with first quarter 2018 reporting.
Classification of Certain Cash Receipts and Cash Payments (*ASU 2016-15: Statement of Cash Flows [Topic 230]: Classification of Certain Cash Receipts and Cash Payments*)	This amendment provides clarifying guidance for classifying cash inflows or outflows on the statement of cash flows where current guidance is unclear or silent.	January 1, 2018	The guidance will be applied using a retrospective transition method beginning with first quarter 2018 reporting.
Clarifying the Definition of a Business (*ASU 2017-01: Business Combinations [Topic 805]: Clarifying the Definition of a Business*)	The amended guidance clarifies the definition of a business for purposes of evaluating whether transactions would be accounted for as acquisitions (or disposals) of assets or businesses.	January 1, 2018	The guidance should be applied using a prospective transition method. The Company does not expect the guidance to have a material impact on its consolidated financial statements.

Standard	**Description**	**Required Date of Implementation**	**Effect on Consolidated Financial Statements**
Standards Not Yet Adopted as of December 31, 2017			
Leases (*ASU 2016-02: Leases [Topic 842]*)	The new guidance requires lessees to record a right-of-use asset and a lease liability for all leases with a term greater than 12 months. While the guidance requires all leases to be recognized in the balance sheet, there continues to be a differentiation between finance leases and operating leases for purposes of income statement recognition and cash flow statement presentation. For finance leases, interest on the lease liability and amortization of the right-of-use asset will be recognized separately in the statement of income. Repayments of principal on those lease liabilities will be classified within financing activities and payments of interest on the lease liability will be classified within operating activities in the statement of cash flows. For operating leases, a single lease cost is recognized in the statement of income and allocated over the lease term, generally on a straight-line basis. All cash payments are presented within operating activities in the statement of cash flows. The accounting applied by lessors is largely unchanged from existing GAAP, however, the guidance eliminates the accounting model for leveraged leases for leases that commence after the effective date of the guidance.	January 1, 2019 (Early adoption permitted)	The Company occupies certain banking offices and uses certain equipment under noncancelable operating lease agreements which currently are not reflected in its consolidated balance sheet. Upon adoption of the guidance, the Company expects to report increased assets and increased liabilities as a result of recognizing right-of-use assets and lease liabilities on its consolidated balance sheet. The Company was committed to $1.1 million of minimum lease payments under noncancelable operating lease agreements at December 31, 2017. The Company does not expect the new guidance will have a material impact to its consolidated statement of income.
Premium Amortization on Purchased Callable Debt Securities (*ASU 2017-08: Receivables—Nonrefundable Fees and Other Costs [Subtopic 310-20]: Premium Amortization on Purchased Callable Debt Securities*)	The amended guidance requires the premium on callable debt securities to be amortized to the earliest call date. The amendments do not require an accounting change for securities held at a discount; the discount continues to be amortized to maturity.	January 1, 2019 (Early adoption permitted)	The amendments should be applied on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. The Company does not expect the guidance to have a material impact on its consolidated financial statements.

Standard	**Description**	**Required Date of Implementation**	**Effect on Consolidated Financial Statements**
Standards Not Yet Adopted as of December 31, 2017			
Measurement of Credit Losses on Financial Instruments (*ASU 2016-13: Financial Instruments—Credit Losses [Topic 326]: Measurement of Credit Losses on Financial Instruments*)	The amended guidance replaces the current incurred loss model for determining the allowance for credit losses. The guidance requires financial assets measured at amortized cost to be presented at the net amount expected to be collected. The allowance for credit losses will represent a valuation account that is deducted from the amortized cost basis of the financial assets to present their net carrying value at the amount expected to be collected. The income statement will reflect the measurement of credit losses for newly recognized financial assets as well as expected increases or decreases of expected credit losses that have taken place during the period. When determining the allowance, expected credit losses over the contractual term of the financial asset(s) (taking into account prepayments) will be estimated considering relevant information about past events, current conditions, and reasonable and supportable forecasts that affect the collectability of the reported amount. The amended guidance also requires recording an allowance for credit losses for purchased financial assets with a more-than-insignificant amount of credit deterioration since origination. The initial allowance for these assets will be added to the purchase price at acquisition rather than being reported as an expense. Subsequent changes in the allowance will be recorded through the income statement as an expense adjustment. In addition, the amended guidance requires credit losses relating to available-for-sale debt securities to be recorded through an allowance for credit losses. The calculation of credit losses for available-for-sale securities will be similar to how it is determined under existing guidance.	January 1, 2020 (Early adoption permitted as of January 1, 2019)	The Company is assessing the new guidance to determine what modifications to existing credit estimation processes may be required. The Company expects that the new guidance will result in an increase in its allowance for credit losses as a result of considering credit losses over the expected life of its loan and debt securities portfolios. Increases in the level of allowances will also reflect new requirements to include estimated credit losses on investment securities classified as held-to-maturity, if any. The Company has formed an Implementation Committee, whose membership includes representatives of senior management, to develop plans that will encompass: (1) internal methodology changes (2) data collection and management activities, (3) internal communication requirements, and (4) estimation of the projected impact of this guidance. The amount of any change in the allowance for credit losses resulting from the new guidance will ultimately be impacted by the provisions of this guidance as well as by the loan and debt security portfolios composition and asset quality at the adoption date, and economic conditions and forecasts at the time of adoption.
Simplifying the Test for Goodwill Impairment (*ASU 2017-04: Intangibles—Goodwill and Other [Topic 350]: Simplifying the Test for Goodwill Impairment*)	The amended guidance eliminates Step 2 from the goodwill impairment test.	January 1, 2020 (Early adoption permitted)	The amendments should be applied using a prospective transition method. The Company does not expect the guidance will have a material impact on its consolidated financial statements, unless at some point in the future one of its reporting units were to fail Step 1 of the goodwill impairment test.

Standard	**Description**	**Required Date of Implementation**	**Effect on Consolidated Financial Statements**
Standards Not Yet Adopted as of December 31, 2017			
Share-based Payment Awards (*ASU 2017-11: Earnings per Share [Topic 260]*)	The amended guidance clarifies which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in FASB Topic 18. An entity should account for the effects of a modification unless specific criteria regarding fair value, vesting condition, and classification are met. The current disclosure requirements in FASB Topic 18 apply regardless of whether an entity is required to apply modification accounting under the amendments in this guidance.	January 1, 2018	The guidance will be applied using a prospective transition method. The Company does not expect the guidance to have a material impact on its consolidated financial statements.

NOTE 3: EARNINGS PER SHARE

Basic earnings per share are calculated by dividing net income available to common shareholders by the weighted average number of common shares outstanding during the period. Net income available to common shareholders is net income to Pathfinder Bancorp, Inc. less the total of preferred dividends declared. Diluted earnings per share include the potential dilutive effect that could occur upon the assumed exercise of issued stock options using the Treasury Stock method. Anti-dilutive shares are common stock equivalents with average exercise prices in excess of the weighted average market price for the period presented. Anti-dilutive stock options, not included in the computation below, were 23,065 and 214,415 for the years ended 2017 and 2016, respectively. Unallocated common shares held by the ESOP are not included in the weighted-average number of common shares outstanding for purposes of calculating earnings per common share until they are committed to be released to plan participants.

The following table sets forth the calculation of basic and diluted earnings per share.

	Years ended December 31,	
(In thousands, except per share data)	2017	2016
Basic Earnings Per Common Share		
Net income available to common shareholders	$ 3,491	$ 3,256
Weighted average common shares outstanding	4,081	4,105
Basic earnings per common share	$ 0.86	$ 0.79
Diluted Earnings Per Common Share		
Net income available to common shareholders	$ 3,491	$ 3,256
Weighted average common shares outstanding	4,081	4,105
Effect of assumed exercise of stock options	108	85
Diluted weighted average common shares outstanding	4,189	4,190
Diluted earnings per common share	$ 0.83	$ 0.78

NOTE 4: INVESTMENT SECURITIES

The amortized cost and estimated fair value of investment securities are summarized as follows:

	December 31, 2017			
(In thousands)	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Available-for-Sale Portfolio				
Debt investment securities:				
US Treasury, agencies and GSEs	$ 41,489	$ 1	$ (154)	$ 41,336
State and political subdivisions	13,960	12	(291)	13,681
Corporate	8,584	108	(92)	8,600
Asset backed securities	6,662	12	(30)	6,644
Residential mortgage-backed - US agency	36,214	23	(495)	35,742
Collateralized mortgage obligations - US agency	54,481	-	(1,133)	53,348
Collateralized mortgage obligations - Private label	11,193	62	(203)	11,052
Total	172,583	218	(2,398)	170,403
Equity investment securities:				
Common stock - financial services industry	663	72	-	735
Total	663	72	-	735
Total available-for-sale	$ 173,246	$ 290	$ (2,398)	$ 171,138
Held-to-Maturity Portfolio				
Debt investment securities:				
US Treasury, agencies and GSEs	$ 4,948	$ 14	$ (14)	$ 4,948
State and political subdivisions	35,130	641	(311)	35,460
Corporate	8,311	151	(159)	8,303
Residential mortgage-backed - US agency	6,853	53	(10)	6,896
Collateralized mortgage obligations - US agency	7,574	83	(215)	7,442
Collateralized mortgage obligations - Private label	3,380	7	(10)	3,377
Total held-to-maturity	$ 66,196	$ 949	$ (719)	$ 66,426

(In thousands)	December 31, 2016 Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Available-for-Sale Portfolio				
Debt investment securities:				
US Treasury, agencies and GSEs	$ 24,263	$ 1	$ (80)	$ 24,184
State and political subdivisions	17,185	33	(737)	16,481
Corporate	15,560	20	(385)	15,195
Asset backed securities	6,696	5	(37)	6,664
Residential mortgage-backed - US agency	31,204	-	(638)	30,566
Collateralized mortgage obligations - US agency	42,124	45	(1,183)	40,986
Collateralized mortgage obligations - Private label	6,682	-	(105)	6,577
Total	143,714	104	(3,165)	140,653
Equity investment securities:				
Mutual funds:				
Ultra short mortgage fund	643	-	(17)	626
Common stock - financial services industry	663	13	-	676
Total	1,306	13	(17)	1,302
Total available-for-sale	$ 145,020	$ 117	$ (3,182)	$ 141,955
Held-to-Maturity Portfolio				
Debt investment securities:				
US Treasury, agencies and GSEs	$ 4,928	$ 30	$ (18)	$ 4,940
State and political subdivisions	30,697	572	(693)	30,576
Corporate	8,240	85	(228)	8,097
Residential mortgage-backed - US agency	6,386	31	(20)	6,397
Collateralized mortgage obligations - US agency	2,927	96	-	3,023
Collateralized mortgage obligations - Private label	1,467	-	(71)	1,396
Total held-to-maturity	$ 54,645	$ 814	$ (1,030)	$ 54,429

The majority of the Company's investments in mortgage-backed securities include pass-through securities and collateralized mortgage obligations issued and guaranteed by Fannie Mae, Freddie Mac, and Ginnie Mae. At December 31, 2017, the Company also held a total of seventeen private-label mortgage-backed securities or collateralized mortgage obligations with an aggregate book balance of $25.2 million and six private-label asset backed securities collateralized by consumer loans with an aggregate book balance of $6.0 million. At December 31, 2016, the Company held a total of seven private-label mortgage-backed securities or collateralized mortgage obligations with an aggregate book balance of $9.8 million and five private-label asset backed securities collateralized by consumer loans with an aggregate book balance of $6.7 million. These investments are relatively short-duration securities with significant credit enhancements. The Company's investments in state and political obligation securities are generally municipal obligations that are categorized as general obligations of the issuer that are supported by the overall taxing authority of the issuer, and in some cases are insured. The obligations issued by school districts are generally supported by state administered insurance funds or credit enhancement programs.

The amortized cost and estimated fair value of debt investments at December 31, 2017 by contractual maturity are shown below. Expected maturities may differ from contractual maturities because borrowers may have the right to call or prepay obligations with or without penalties.

	Available-for-Sale		**Held-to-Maturity**	
(In thousands)	Amortized Cost	Estimated Fair Value	Amortized Cost	Estimated Fair Value
Due in one year or less	$ 21,555	$ 21,506	$ 1,680	$ 1,680
Due after one year through five years	28,957	28,830	11,381	11,488
Due after five years through ten years	11,587	11,642	16,993	17,479
Due after ten years	8,596	8,283	18,335	18,064
Sub-total	70,695	70,261	48,389	48,711
Residential mortgage-backed - US agency	36,214	35,742	6,853	6,896
Collateralized mortgage obligations - US agency	54,481	53,348	7,574	7,442
Collateralized mortgage obligations - Private label	11,193	11,052	3,380	3,377
Totals	$ 172,583	$ 170,403	$ 66,196	$ 66,426

The Company's investment securities' gross unrealized losses and fair value, aggregated by investment category and length of time that individual securities have been in a continuous unrealized loss position, is as follows:

	December 31, 2017								
	Less than Twelve Months			Twelve Months or More			Total		
(Dollars in thousands)	Number of Individual Securities	Unrealized Losses	Fair Value	Number of Individual Securities	Unrealized Losses	Fair Value	Number of Individual Securities	Unrealized Losses	Fair Value
Available-for-Sale Portfolio									
US Treasury, agencies and GSE's	5	$ (105)	$27,359	4	$ (49)	$13,957	9	$ (154)	$ 41,316
State and political subdivisions	18	(24)	2,480	12	(267)	5,041	30	(291)	7,521
Corporate	2	(19)	1,791	1	(73)	1,727	3	(92)	3,518
Asset backed securities	2	(17)	3,123	1	(13)	742	3	(30)	3,865
Residential mortgage-backed - US agency	15	(159)	21,551	9	(336)	10,463	24	(495)	32,014
Collateralized mortgage obligations - US agency	14	(195)	23,790	21	(938)	25,395	35	(1,133)	49,185
Collateralized mortgage obligations - Private label	4	(203)	7,439	-	-	-	4	(203)	7,439
Totals	60	$ (722)	$87,533	48	$ (1,676)	$57,325	108	$ (2,398)	$144,858
Held-to-Maturity Portfolio									
US Treasury, agencies and GSE's	2	$ (2)	$ 1,990	1	$ (12)	$ 988	3	$ (14)	$ 2,978
State and political subdivisions	8	(55)	5,668	11	(256)	8,644	19	(311)	14,312
Corporate	3	(10)	1,412	1	(149)	2,087	4	(159)	3,499
Residential mortgage-backed - US agency	2	(10)	1,909	-	-	-	2	(10)	1,909
Collateralized mortgage obligations - US agency	2	(215)	4,418	-	-	-	2	(215)	4,418
Collateralized mortgage obligations - Private label	1	(10)	1,119	-	-	-	1	(10)	1,119
Totals	18	$ (302)	$16,516	13	$ (417)	$11,719	31	$ (719)	$ 28,235

	December 31, 2016								
	Less than Twelve Months			Twelve Months or More			Total		
(Dollars in thousands)	Number of Individual Securities	Unrealized Losses	Fair Value	Number of Individual Securities	Unrealized Losses	Fair Value	Number of Individual Securities	Unrealized Losses	Fair Value
Available-for-Sale Portfolio									
US Treasury, agencies and GSE's	6	$ (80)	$ 22,161	-	$ -	$ -	6	$ (80)	$ 22,161
State and political subdivisions	53	(737)	14,057	-	-	-	53	(737)	14,057
Corporate	10	(385)	10,587	-	-	-	10	(385)	10,587
Asset backed securities	3	(37)	4,455	-	-	-	3	(37)	4,455
Equity and other investments	1	(17)	626	-	-	-	1	(17)	626
Residential mortgage-backed - US agency	23	(638)	29,849	-	-	-	23	(638)	29,849
Collateralized mortgage obligations - US agency	28	(1,087)	33,376	4	(96)	2,514	32	(1,183)	35,890
Collateralized mortgage obligations - Private label	5	(105)	6,577	-	-	-	5	(105)	6,577
Totals	129	$ (3,086)	$121,688	4	$ (96)	$2,514	133	$ (3,182)	$124,202
Held-to-Maturity Portfolio									
US Treasury, agencies and GSE's	1	$ (18)	$ 982	-	$ -	$ -	1	$ (18)	$ 982
State and political subdivisions	16	(693)	10,038	-	-	-	16	(693)	10,038
Corporate	5	(228)	4,402	-	-	-	5	(228)	4,402
Residential mortgage-backed - US agency	3	(20)	1,869	-	-	-	3	(20)	1,869
Collateralized mortgage obligations - Private label	1	(71)	1,396	-	-	-	1	(71)	1,396
Totals	26	$ (1,030)	$ 18,687	-	$ -	$ -	26	$ (1,030)	$ 18,687

The Company conducts a formal review of investment securities on a quarterly basis for the presence of other-than-temporary impairment ("OTTI"). The Company assesses whether OTTI is present when the fair value of a debt security is less than its amortized cost basis at the statement of condition date. Under these circumstances, OTTI is considered to have occurred (1) if we intend to sell the security; (2) if it is "more likely than not" we will be required to sell the security before recovery of its amortized cost basis; or (3) the present value of expected cash flows is not anticipated to be sufficient to recover the entire amortized cost basis. The guidance requires that credit-related OTTI is recognized in earnings while non-credit-related OTTI on securities not expected to be sold is recognized in other comprehensive income ("OCI"). Non-credit-related OTTI is based on other factors, including illiquidity and changes in the general interest rate environment. Presentation of OTTI is made in the consolidated statement of income on a gross basis, including both the portion recognized in earnings as well as the portion recorded in OCI. The gross OTTI would then be offset by the amount of non-credit-related OTTI, showing the net as the impact on earnings.

Management does not believe any individual unrealized loss in other securities within the portfolio as of December 31, 2017 represents OTTI. All securities which have been in an unrealized loss position for 12 months or more are issued by United States agencies or government sponsored enterprises and consist of mortgage-backed securities, collateralized mortgage obligations and direct agency financings. These positions in US government agency and government-sponsored enterprises are deemed to have no credit impairment, thus, the disclosed unrealized losses relate directly to changes in interest rates subsequent to the acquisition of the individual securities. The Company does not intend to sell these securities, nor is it more likely than not that the Company will be required to sell these securities prior to the recovery of the amortized cost.

In determining whether OTTI has occurred for equity securities, the Company considers the applicable factors described above and the length of time the equity security's fair value has been below the carrying amount. At December 31, 2016, the Company had one mutual fund investment, categorized as an equity security, with a fair value below its book value. This security, which was sold in 2017, at a realized loss $19,000, represented an ownership interest in a mutual fund primarily invested in adjustable-rate mortgage securities. This security had a fair value of $626,000 at December 31, 2016 and that value was $17,000 below its book value at that date.

Proceeds of $67.6 million and $33.2 million, respectively on sales and redemptions of securities for the years ended December 31 resulted in gross realized gains (losses) detailed below:

(In thousands)	2017	2016
Realized gains on investments	$ 427	$ 526
Realized gains on hedging activity	428	85
Realized losses on investments	(366)	(17)
	$ 489	$ 594

As of December 31, 2017 and December 31, 2016, securities with a fair value of $113.0 million and $96.4 million, respectively, were pledged to collateralize certain municipal deposit relationships. As of the same dates, securities with a fair value of $19.9 million and $12.9 million were pledged against certain borrowing arrangements.

Management has reviewed its loan and mortgage-backed securities portfolios and determined that, to the best of its knowledge, little or no exposure exists to sub-prime or other high-risk residential mortgages. The Company is not in the practice of investing in, or originating, these types of investments or loans.

NOTE 5: LOANS

Major classifications of loans are as follows:

(In thousands)	December 31, 2017	December 31, 2016
Residential mortgage loans:		
1-4 family first-lien residential mortgages	$ 216,793	$ 199,000
Construction	5,558	8,505
Total residential mortgage loans	222,351	207,505
Commercial loans:		
Real estate	192,525	150,698
Lines of credit	51,131	50,477
Other commercial and industrial	50,251	40,394
Tax exempt loans	10,405	12,523
Total commercial loans	304,312	254,092
Consumer loans:		
Home equity and junior liens	25,935	24,722
Other consumer	28,646	6,293
Total consumer loans	54,581	31,015
Total loans	581,244	492,612
Net deferred loan fees	(413)	(465)
Less allowance for loan losses	(7,126)	(6,247)
Loans receivable, net	$ 573,705	$ 485,900

The Company originates residential mortgage, commercial and consumer loans largely to customers throughout Oswego, Onondaga and surrounding counties. Although the Company has a diversified loan portfolio, a substantial portion of its borrowers' abilities to honor their contracts is dependent upon the counties' employment and economic conditions.

Although the Bank may occasionally purchase or fund loan participation interests outside of its primary market areas, the Bank generally originates residential mortgage, commercial, and consumer loans largely to customers throughout Oswego and Onondaga counties. Although the Bank has a diversified loan portfolio, a substantial portion of its borrowers' abilities to honor their loan contracts is dependent upon the counties' employment and economic conditions.

The Bank acquired $15.6 million and $10.2 million of loans originated by an unrelated financial institution, located outside of the Bank's market area, in January 2017 and April 2017, respectively. The acquired loan pools represented a 90% participating interest in a total of 1,231 loans secured by liens on automobiles with maturities ranging primarily from two to six years. These loans will be serviced through their respective maturities by the originating financial institution. At December 31, 2017 there were 1,082 loans outstanding with a remaining outstanding carrying value of $19.6 million. Since the acquisition of these loan pools, a total of two loans, with a combined outstanding balance of $44,800, have been charged-off as uncollectible.

As of December 31, 2017 and December 31, 2016, residential mortgage loans with a carrying value of $148.1 million and $140.3 million, respectively, have been pledged by the Company to the Federal Home Loan Bank of New York ("FHLBNY") under a blanket collateral agreement to secure the Company's line of credit and term borrowings.

Loan Origination / Risk Management

The Company has lending policies and procedures in place that are designed to maximize loan income within an acceptable level of risk. Management and the board of directors reviews and approves these policies and procedures on a regular basis. A reporting system supplements the review process by frequently providing management with reports related to loan production, loan quality, loan delinquencies, nonperforming and potential problem loans. Diversification in the loan portfolio is a means of managing risk associated with fluctuations in economic conditions.

Risk Characteristics of Portfolio Segments

Each portfolio segment generally carries its own unique risk characteristics.

The residential mortgage loan segment is impacted by general economic conditions, unemployment rates in the Bank's service area, real estate values and the forward expectation of improvement or deterioration in economic conditions.

The commercial loan segment is impacted by general economic conditions but, more specifically, the industry segment in which each borrower participates. Unique competitive changes within a borrower's specific industry, or geographic location could cause significant changes in the borrower's revenue stream, and therefore, impact its ability to repay its obligations. Commercial real estate is also subject to general economic conditions but changes within this segment typically lag changes seen within the consumer and commercial segment. Included within this portfolio are both owner occupied real estate, in which the borrower occupies the majority of the real estate property and upon which the majority of the sources of repayment of the obligation is dependent upon, and non-owner occupied real estate, in which several tenants comprise the repayment source for this portfolio segment. The composition and competitive position of the tenant structure may cause adverse changes in the repayment of debt obligations for the non-owner occupied class within this segment.

The consumer loan segment is impacted by general economic conditions, unemployment rates in the geographic areas in which borrowers and loan collateral are located, and the forward expectation of improvement or deterioration in economic conditions.

Real estate loans, including residential mortgages, commercial real estate loans and home equity, comprise 76% of the portfolio in 2017, substantially identical to the composition in 2016, where such loans represented 78% of total loans. Loans secured by real estate generally provide strong collateral protection and thus significantly reduce the inherent credit risk in the portfolio.

Management has reviewed its loan portfolio and determined that, to the best of its knowledge, little or no exposure exists to sub-prime or other high-risk residential mortgages. The Company is not in the practice of originating these types of loans.

Description of Credit Quality Indicators

The Company utilizes an eight tier risk rating system to evaluate the quality of its loan portfolio. Loans that are risk rated "1" through "4" are considered "Pass" loans. In accordance with regulatory guidelines, loans rated "5" through "8" are termed "criticized" loans and loans rated "6" through "8" are termed "classified" loans. A description of the Company's credit quality indicators follows.

For Commercial Loans:

1. Prime: A loan that is fully secured by properly margined Pathfinder Bank deposit account(s) or an obligation of the US Government. It may also be unsecured if it is supported by a very strong financial condition and, in the case of a commercial loan, excellent management. There exists an unquestioned ability to repay the loan in accordance with its terms.
2. Strong: Desirable relationship of somewhat less stature than Prime grade. Possesses a sound documented repayment source, and back up, which will allow repayment within the terms of the loan. Individual loans backed by solid assets, character and integrity. Ability of individual or company management is good and well established. Probability of serious financial deterioration is unlikely.
3. Satisfactory: Stable financial condition with cash flow sufficient for debt service coverage. Satisfactory loans of average strength having some deficiency or vulnerability to changing economic or industry conditions but performing as agreed with documented evidence of repayment capacity. May be unsecured loans to borrowers with satisfactory credit and financial strength. Satisfactory provisions for management succession and a secondary source of repayment exists.

4. Satisfactory Watch: A four is not a criticized or classified credit. These credits do not display the characteristics of a criticized asset as defined by the regulatory definitions. A credit is given a Satisfactory Watch designation if there are matters or trends observed deserving attention somewhat beyond normal monitoring. Borrowing obligations may be handled according to agreement but could be adversely impacted by developing factors such as industry conditions, operating problems, litigation pending of a significant nature or declining collateral quality and adequacy.
5. Special Mention: A warning risk grade that portrays one or more weaknesses that may be tolerated in the short term. Assets in this category are currently protected but are potentially weak. This loan would not normally be booked as a new credit, but may have redeeming characteristics persuading the Bank to continue working with the borrower. Loans accorded this classification have potential weaknesses which may, if not checked or corrected, weaken the company's assets, inadequately protect the Bank's position or effect the orderly, scheduled reduction of the debt at some future time.
6. Substandard: The relationship is inadequately protected by the current net worth and cash flow capacity of the borrower, guarantor/endorser, or of the collateral pledged. Assets have a well-defined weakness or weaknesses that jeopardize the orderly liquidation of the debt. The relationship shows deteriorating trends or other deficient areas. The loan may be nonperforming and expected to remain so for the foreseeable future. Relationship balances may be adequately secured by asset value; however a deteriorated financial condition may necessitate collateral liquidation to effect repayment. This would also include any relationship with an unacceptable financial condition requiring excessive attention of the officer due to the nature of the credit risk or lack of borrower cooperation.
7. Doubtful: The relationship has all the weaknesses inherent in a credit graded 5 with the added characteristic that the weaknesses make collection on the basis of currently existing facts, conditions and value, highly questionable or improbable. The possibility of some loss is extremely high, however its classification as an anticipated loss is deferred until a more exact determination of the extent of loss is determined. Loans in this category must be on nonaccrual.
8. Loss: Loans are considered uncollectible and of such little value that continuance as bankable assets is not warranted. It is not practicable or desirable to defer writing off this basically worthless asset even though partial recovery may be possible in the future.

For Residential Mortgage and Consumer Loans:

Residential mortgage and consumer loans are assigned a "Pass" rating unless the loan has demonstrated signs of weakness as indicated by the ratings below.

5. Special Mention: All loans sixty days past due are classified Special Mention. The loan is not upgraded until it has been current for six consecutive months.
6. Substandard: All loans 90 days past due are classified Substandard. The loan is not upgraded until it has been current for six consecutive months.
7. Doubtful: The relationship has all the weaknesses inherent in a credit graded 5 with the added characteristic that the weaknesses make collection on the basis of currently existing facts, conditions and value, highly questionable or improbable. The possibility of some loss is extremely high.

The risk ratings for classified loans are evaluated at least quarterly for commercial loans or when credit deficiencies arise, such as delinquent loan payments, for commercial, residential mortgage or consumer loans. See further discussion of risk ratings in Note 1.

The following table presents the segments and classes of the loan portfolio summarized by the aggregate pass rating and the criticized and classified ratings of special mention, substandard and doubtful within the Company's internal risk rating system:

	As of December 31, 2017				
(In thousands)	Pass	Special Mention	Substandard	Doubtful	Total
Residential mortgage loans:					
1-4 family first-lien residential mortgages	$ 211,825	$ 891	$ 1,869	$ 2,208	$ 216,793
Construction	5,558		-	-	5,558
Total residential mortgage loans	217,383	891	1,869	2,208	222,351
Commercial loans:					
Real estate	187,073	1,372	2,024	2,056	192,525
Lines of credit	50,353	195	523	60	51,131
Other commercial and industrial	48,892	407	532	420	50,251
Tax exempt loans	10,405	-	-	-	10,405
Total commercial loans	296,723	1,974	3,079	2,536	304,312
Consumer loans:					
Home equity and junior liens	25,396	61	304	174	25,935
Other consumer	28,584	55	7	-	28,646
Total consumer loans	53,980	116	311	174	54,581
Total loans	$ 568,086	$ 2,981	$ 5,259	$ 4,918	$ 581,244

	As of December 31, 2016				
(In thousands)	Pass	Special Mention	Substandard	Doubtful	Total
Residential mortgage loans:					
1-4 family first-lien residential mortgages	$ 194,377	$ 1,445	$ 2,115	$ 1,063	$ 199,000
Construction	8,505	-	-	-	8,505
Total residential mortgage loans	202,882	1,445	2,115	1,063	207,505
Commercial loans:					
Real estate	143,126	3,714	3,858	-	150,698
Lines of credit	49,393	684	400	-	50,477
Other commercial and industrial	39,027	661	702	4	40,394
Tax exempt loans	12,523	-	-	-	12,523
Total commercial loans	244,069	5,059	4,960	4	254,092
Consumer loans:					
Home equity and junior liens	23,963	170	389	200	24,722
Other consumer	6,224	17	8	44	6,293
Total consumer loans	30,187	187	397	244	31,015
Total loans	$ 477,138	$ 6,691	$ 7,472	$ 1,311	$ 492,612

Nonaccrual and Past Due Loans

Loans are considered past due if the required principal and interest payments have not been received within thirty days of the payment due date.

An age analysis of past due loans, exclusive of deferred costs, segregated by class of loans were as follows:

	As of December 31, 2017					
(In thousands)	30-59 Days Past Due and Accruing	60-89 Days Past Due and Accruing	90 Days and Over	Total Past Due	Current	Total Loans Receivable
Residential mortgage loans:						
1-4 family first-lien residential mortgages	$ 1,196	$ 925	$ 2,088	$ 4,209	$ 212,584	$ 216,793
Construction	-	-	-	-	5,558	5,558
Total residential mortgage loans	1,196	925	2,088	4,209	218,142	222,351
Commercial loans:						
Real estate	720	2,056	1,545	4,321	188,204	192,525
Lines of credit	1,482	31	132	1,645	49,486	51,131
Other commercial and industrial	575	60	766	1,401	48,850	50,251
Tax exempt loans	-	-	-	-	10,405	10,405
Total commercial loans	2,777	2,147	2,443	7,367	296,945	304,312
Consumer loans:						
Home equity and junior liens	94	74	300	468	25,467	25,935
Other consumer	192	50	63	305	28,341	28,646
Total consumer loans	286	124	363	773	53,808	54,581
Total loans	$ 4,259	$ 3,196	$ 4,894	$ 12,349	$ 568,895	$ 581,244

	As of December 31, 2016					
(In thousands)	30-59 Days Past Due and Accruing	60-89 Days Past Due and Accruing	90 Days and Over	Total Past Due	Current	Total Loans Receivable
Residential mortgage loans:						
1-4 family first-lien residential mortgages	$ 1,247	$ 832	$ 2,560	$ 4,639	$ 194,361	$ 199,000
Construction	-	-	-	-	8,505	8,505
Total residential mortgage loans	1,247	832	2,560	4,639	202,866	207,505
Commercial loans:						
Real estate	1,063	375	1,223	2,661	148,037	150,698
Lines of credit	819	-	-	819	49,658	50,477
Other commercial and industrial	333	-	640	973	39,421	40,394
Tax exempt loans	-	-	-	-	12,523	12,523
Total commercial loans	2,215	375	1,863	4,453	249,639	254,092
Consumer loans:						
Home equity and junior liens	105	157	338	600	24,122	24,722
Other consumer	8	13	50	71	6,222	6,293
Total consumer loans	113	170	388	671	30,344	31,015
Total loans	$ 3,575	$ 1,377	$ 4,811	$ 9,763	$ 482,849	$ 492,612

Year-end nonaccrual loans, segregated by class of loan, were as follows:

(In thousands)	December 31, 2017	December 31, 2016
Residential mortgage loans:		
1-4 family first-lien residential mortgages	$ 2,088	$ 2,560
	2,088	2,560
Commercial loans:		
Real estate	1,545	1,223
Lines of credit	132	-
Other commercial and industrial	766	640
	2,443	1,863
Consumer loans:		
Home equity and junior liens	300	338
Other consumer	63	50
	363	388
Total nonaccrual loans	$ 4,894	$ 4,811

There were no loans past due ninety days or more and still accruing interest at December 31, 2017 or 2016.

The Company is required to disclose certain activities related to Troubled Debt Restructurings ("TDR") in accordance with accounting guidance. Certain loans have been modified in a TDR where economic concessions have been granted to a borrower who is experiencing, or expected to experience, financial difficulties. These economic concessions could include a reduction in the loan interest rate, extension of payment terms, reduction of principal amortization, or other actions that it would not otherwise consider for a new loan with similar risk characteristics.

The Company is required to disclose new TDRs for each reporting period for which an income statement is being presented. Pre-modification outstanding recorded investment is the principal loan balance less the provision for loan losses before the loan was modified as a TDR. Post-modification outstanding recorded investment is the principal balance less the provision for loan losses after the loan was modified as a TDR. Additional provision for loan losses is the change in the allowance for loan losses between the pre-modification outstanding recorded investment and post-modification outstanding recorded investment.

The Company had one loan that had been modified as a TDR for the year ended December 31, 2017, which subsequently paid off in the fourth quarter of 2017. Both the pre-modification and post-modification recorded investment in the commercial real estate loan was $2.0 million as a result of economic concessions granted, which included extended interest only payment terms. The Company was not required to increase the specific reserves against this loan during the third quarter of 2017.

The table below details loans that had been modified as TDRs for the year ended December 31, 2016.

	For the year ended December 31, 2016			
(In thousands)	Number of loans	Pre-modification outstanding recorded investment	Post-modification outstanding recorded investment	Additional provision for loan losses
Individually evaluated for impairment:				
Residential mortgage loans	3	$ 127	$ 135	$ 29
Commercial real estate loans	1	$ 2,088	$ 2,088	$ -

The TDRs individually evaluated for impairment have been classified as TDRs due to economic concessions granted, which consisted of additional funds advanced without associated increases in collateral, interest rate reduction, extended term and/or extended interest only payment terms. The Company was required to increase the specific reserves against the loans individually reviewed for impairment by $29,000, which was a component of the provision for loan losses in the fourth quarter of 2016.

The Company is required to disclose loans that have been modified as TDRs within the previous 12 months in which there was payment default after the restructuring. The Company defines payment default as any loans 90 days past due on contractual payments.

The Company had no loans that had been modified as TDRs during the twelve months prior to December 31, 2017, which had subsequently defaulted during the year ended December 31, 2017.

The Company had no loans that had been modified as TDRs during the twelve months prior to December 31, 2016, which had subsequently defaulted during the year ended December 31, 2016.

When the Company modifies a loan within a portfolio segment that is individually evaluated for impairment, a potential impairment is analyzed either based on the present value of the expected future cash flows discounted at the interest rate of the original loan terms or the fair value of the collateral less costs to sell. If it is determined that the value of the loan is less than its recorded investment, then impairment is recognized as a component of the provision for loan losses, an associated increase to the allowance for loan losses or as a charge-off to the allowance for loan losses in the current period.

Impaired Loans

The following table summarizes impaired loans information by portfolio class:

	December 31, 2017			December 31, 2016		
(In thousands)	Recorded Investment	Unpaid Principal Balance	Related Allowance	Recorded Investment	Unpaid Principal Balance	Related Allowance
With no related allowance recorded:						
1-4 family first-lien residential mortgages	$ 900	$ 909	$ -	$ 850	$ 857	$ -
Commercial real estate	3,314	3,360	-	4,254	4,344	-
Commercial lines of credit	507	507	-	400	400	-
Other commercial and industrial	523	524	-	470	470	-
Home equity and junior liens	80	80	-	140	140	-
With an allowance recorded:						
1-4 family first-lien residential mortgages	958	958	210	763	763	117
Commercial real estate	2,186	2,187	320	818	872	455
Commercial lines of credit	40	40	40	-	-	-
Other commercial and industrial	525	525	391	552	552	553
Home equity and junior liens	210	210	142	345	345	5
Total:						
1-4 family first-lien residential mortgages	1,858	1,867	210	1,613	1,620	117
Commercial real estate	5,500	5,547	320	5,072	5,216	455
Commercial lines of credit	547	547	40	400	400	-
Other commercial and industrial	1,048	1,049	391	1,022	1,022	553
Home equity and junior liens	290	290	142	485	485	5
Totals	$ 9,243	$ 9,300	$ 1,103	$ 8,592	$ 8,743	$ 1,130

The following table presents the average recorded investment in impaired loans for the years ended December 31:

(In thousands)		2017		2016
1-4 family first-lien residential mortgages	$	1,553	$	777
Commercial real estate		5,097		4,325
Commercial lines of credit		447		479
Other commercial and industrial		976		724
Home equity and junior liens		283		325
Other consumer		-		2
Total	$	8,356	$	6,632

The following table presents the cash basis interest income recognized on impaired loans for the years ended December 31:

(In thousands)		2017		2016
1-4 family first-lien residential mortgages	$	71	$	64
Commercial real estate		247		161
Commercial lines of credit		27		22
Other commercial and industrial		30		44
Home equity and junior liens		13		13
Other consumer		-		-
Total	$	388	$	304

NOTE 6: ALLOWANCE FOR LOAN LOSSES

Changes in the allowance for loan losses for the years ended December 31, 2017 and 2016 and information pertaining to the allocation of the allowance for loan losses and balances of the allowance for loan losses and loans receivable based on individual and collective impairment evaluation by loan portfolio class at the indicated dates are summarized in the tables below. An allocation of a portion of the allowance to a given portfolio class does not limit the Company’s ability to absorb losses in another portfolio class.

	December 31, 2017				
(In thousands)	1-4 family first-lien residential mortgage	Construction	Commercial real estate	Commercial lines of credit	Other commercial and industrial
Allowance for loan losses:					
Beginning Balance	$ 759	$ -	$ 2,935	$ 397	$ 1,658
Charge-offs	(166)	-	(505)	(60)	(22)
Recoveries	13	-	-	-	15
Provisions (credits)	259	-	1,159	398	(437)
Ending balance	$ 865	$ -	$ 3,589	$ 735	$ 1,214
Ending balance: related to loans individually evaluated for impairment	$ 210	$ -	$ 320	$ 40	$ 391
Ending balance: related to loans collectively evaluated for impairment	$ 655	$ -	$ 3,269	$ 695	$ 823
Loans receivables:					
Ending balance	$ 216,793	$ 5,558	$ 192,525	$ 51,131	$ 50,251
Ending balance: individually evaluated for impairment	$ 1,858	$ -	$ 5,500	$ 547	$ 1,048
Ending balance: collectively evaluated for impairment	$ 214,935	$ 5,558	$ 187,025	$ 50,584	$ 49,203

	Tax exempt	Home equity and junior liens	Other consumer	Unallocated	Total
Allowance for loan losses:					
Beginning Balance	$ 1	$ 331	$ 166	$ -	$ 6,247
Charge-offs	-	(69)	(142)	-	$ (964)
Recoveries	-	6	40	-	$ 74
Provisions	-	246	144	-	$ 1,769
Ending balance	$ 1	$ 514	$ 208	$ -	$ 7,126
Ending balance: related to loans individually evaluated for impairment	$ -	$ 142	$ -	$ -	$ 1,103
Ending balance: related to loans collectively evaluated for impairment	$ 1	$ 372	$ 208	$ -	$ 6,023
Loans receivables:					
Ending balance	$ 10,405	$ 25,935	$ 28,646		$ 581,244
Ending balance: individually evaluated for impairment	$ -	$ 290	$ -		$ 9,243
Ending balance: collectively evaluated for impairment	$ 10,405	$ 25,645	$ 28,646		$ 572,001

(In thousands)	December 31, 2016 1-4 family first-lien residential mortgage	Construction	Commercial real estate	Commercial lines of credit	Other commercial and industrial
Allowance for loan losses:					
Beginning Balance	$ 581	$ -	$ 2,983	$ 401	$ 1,270
Charge-offs	(242)	-	-	(69)	-
Recoveries	13	-	6	11	14
Provisions (credits)	407	-	(54)	54	374
Ending balance	$ 759	$ -	$ 2,935	$ 397	$ 1,658
Ending balance: related to loans individually evaluated for impairment	$ 117	-	$ 455	$ -	$ 553
Ending balance: related to loans collectively evaluated for impairment	$ 642	-	$ 2,480	$ 397	$ 1,105
Loans receivables:					
Ending balance	$ 199,000	$ 8,505	$ 150,698	$ 50,477	$ 40,394
Ending balance: individually evaluated for impairment	$ 1,613	$ -	$ 5,072	$ 400	$ 1,022
Ending balance: collectively evaluated for impairment	$ 197,387	$ 8,505	$ 145,626	$ 50,077	$ 39,372

	Tax exempt	Home equity and junior liens	Other consumer	Unallocated	Total
Allowance for loan losses:					
Beginning Balance	$ 3	$ 350	$ 118	$ -	$ 5,706
Charge-offs	-	(147)	(61)	-	(519)
Recoveries	-	10	53	-	107
Provisions (credits)	(2)	118	56	-	953
Ending balance	$ 1	$ 331	$ 166	$ -	$ 6,247
Ending balance: related to loans individually evaluated for impairment	$ -	$ 5	$ -	-	$ 1,130
Ending balance: related to loans collectively evaluated for impairment	$ 1	$ 326	$ 166	-	$ 5,117
Loans receivables:					
Ending balance	$ 12,523	$ 24,722	$ 6,293		$ 492,612
Ending balance: individually evaluated for impairment	$ -	$ 485	$ -		$ 8,592
Ending balance: collectively evaluated for impairment	$ 12,523	$ 24,237	$ 6,293		$ 484,020

The Company's methodology for determining its allowance for loan losses includes an analysis of qualitative factors that are added to the historical loss rates in arriving at the total allowance for loan losses needed for this general pool of loans. The qualitative factors include:

- Changes in national and local economic trends;
- The rate of growth in the portfolio;
- Trends of delinquencies and nonaccrual balances;
- Changes in loan policy; and
- Changes in lending management experience and related staffing.

Each factor is assigned a value to reflect improving, stable or declining conditions based on management's best judgment using relevant information available at the time of the evaluation. These qualitative factors, applied to each product class, make the evaluation inherently subjective, as it requires material estimates that may be susceptible to significant revision as more information becomes available. Adjustments to the factors are supported through documentation of changes in conditions in a narrative accompanying the allowance for loan losses analysis and calculation.

The allocation of the allowance for loan losses summarized on the basis of the Company's calculation methodology was as follows:

	December 31, 2017				
(In thousands)	1-4 family first-lien residential mortgage	Construction	Commercial real estate	Commercial lines of credit	Other commercial and industrial
Specifically reserved	$ 210	$ -	$ 320	$ 40	$ 391
Historical loss rate	104	-	103	40	15
Qualitative factors	551	-	3,166	655	808
Total	$ 865	$ -	$ 3,589	$ 735	$ 1,214

	Tax exempt	Home equity and junior liens	Other consumer	Unallocated	Total
Specifically reserved	$ -	$ 142	$ -	$ -	$ 1,103
Historical loss rate	-	41	59	-	362
Qualitative factors	1	331	149	-	5,661
Total	$ 1	$ 514	$ 208	$ -	$ 7,126

	December 31, 2016				
(In thousands)	1-4 family first-lien residential mortgage	Construction	Commercial real estate	Commercial lines of credit	Other commercial and industrial
Specifically reserved	$ 117	$ -	$ 455	$ -	$ 553
Historical loss rate	106	-	45	31	50
Qualitative factors	536	-	2,435	366	1,055
Total	$ 759	$ -	$ 2,935	$ 397	$ 1,658

	Tax exempt	Home equity and junior liens	Other consumer	Unallocated	Total
Specifically reserved	$ -	$ 5	$ -	$ -	$ 1,130
Historical loss rate	-	35	16	-	283
Qualitative factors	1	291	150	-	4,834
Total	$ 1	$ 331	$ 166	$ -	$ 6,247

NOTE 7: SERVICING

Loans serviced for others are not included in the accompanying consolidated statements of condition. At December 31, 2017 and 2016, the Bank serviced 231 and 268 residential mortgage loans for others, respectively. The unpaid principal balances of mortgage loans serviced for others were $14.3 million and $17.0 million at December 31, 2017 and 2016, respectively. The balance of capitalized servicing rights included in other assets at December 31, 2017 and 2016, was $28,000 and $40,000, respectively.

The following summarizes mortgage servicing rights capitalized and amortized:

(In thousands)	2017	2016
Mortgage servicing rights capitalized	$ -	$ -
Mortgage servicing rights amortized	$ 12	$ 12

NOTE 8: PREMISES AND EQUIPMENT

A summary of premises and equipment at December 31, is as follows:

(In thousands)	2017	2016
Land	$ 2,205	$ 2,205
Buildings	14,917	13,704
Furniture, fixtures and equipment	13,515	12,948
Construction in progress	650	455
	31,287	29,312
Less: Accumulated depreciation	15,170	14,135
	$ 16,117	$ 15,177

Depreciation expense was $1.0 million in both 2017 and 2016.

NOTE 9: FORECLOSED REAL ESTATE

The Company is required to disclose the carrying amount of foreclosed residential real estate properties held at each reporting period as a result of obtaining physical possession of the property.

(Dollars in thousands)	Number of properties	December 31, 2017	Number of properties	December 31, 2016
Foreclosed residential real estate	5	$ 468	7	$ 393

At December 31, 2017, the Company reported $805,000 in residential real estate loans in the process of foreclosure.

NOTE 10: GOODWILL AND INTANGIBLE ASSETS

Goodwill represents the excess cost of an acquisition over the fair value of the net assets acquired. Goodwill is not amortized, but is evaluated annually for impairment or between annual evaluations in certain circumstances. Management performs an annual assessment of the Company’s goodwill to determine whether or not any impairment of the carrying value may exist.

Of the $4.5 million of goodwill carried on the Company’s books as of December 31, 2017, $3.8 million of this amount was due to prior periods acquisitions of bank branches and $696,000 was due to the 2013 acquisition of the FitzGibbons Agency by Pathfinder Risk Management Company, Inc. and the 2015 acquisition of the Huntington Agency.

The Company is permitted to assess qualitative factors to determine if it is more likely than not that the fair value of the reporting unit is less than the carrying value. Based on the results of the assessment, management has determined that the carrying value of goodwill in the amount of $4.5 million is not impaired as of December 31, 2017.

The identifiable intangible asset of $182,000 as of December 31, 2017 was due to the acquisition of the FitzGibbons and Huntington Agencies and represents the amortized carrying amount of the customer lists intangible. The weighted average amortization period of this intangible asset is 7.0 years.

The gross carrying amount and annual amortization for this identifiable intangible asset are as follows:

	December 31,	
(In thousands)	2017	2016
Gross carrying amount	$ 198	$ 214
Accumulated amortization	(16)	(16)
Net amortizing intangibles	$ 182	$ 198

The estimated amortization expense for each of the five succeeding years ended December 31, is as follows:

(In thousands)	
2018	$ 16
2019	16
2020	16
2021	16
2022	16
Thereafter	102
Total	$ 182

NOTE 11: DEPOSITS

A summary of deposits at December 31 is as follows:

(In thousands)	2017	2016
Savings accounts	$ 80,587	$ 80,139
Time accounts	160,736	132,007
Time accounts of $250,000 or more	52,691	57,349
Money management accounts	14,905	14,718
MMDA accounts	253,088	192,692
Demand deposit interest-bearing	66,093	53,587
Demand deposit noninterest-bearing	89,783	75,282
Mortgage escrow funds	5,720	5,209
Total Deposits	$ 723,603	$ 610,983

At December 31, 2017, the scheduled maturities of time deposits are as follows:

(In thousands)	
Year of Maturity:	
2018	$ 146,318
2019	42,244
2020	14,522
2021	5,889
2022	2,613
Thereafter	1,841
Total	$ 213,427

In addition to deposits obtained from its business operations within its target market areas, the Bank also obtains brokered deposits through various programs administered by Promontory Interfinancial Network.

	At December 31,					
	2017			2016		
(In thousands)	Non-Brokered	Brokered	Total	Non-Brokered	Brokered	Total
Savings accounts	$ 80,587	$ -	$ 80,587	$ 80,139	$ -	$ 80,139
Time accounts	109,666	51,070	$ 160,736	89,200	42,807	132,007
Time accounts of $250,000 or more	52,691	-	$ 52,691	57,349	-	57,349
Money management accounts	14,905	-	$ 14,905	14,718	-	14,718
MMDA accounts	159,032	94,056	$ 253,088	105,755	86,937	192,692
Demand deposit interest-bearing	66,093	-	$ 66,093	53,587	-	53,587
Demand deposit noninterest-bearing	89,783	-	$ 89,783	75,282	-	75,282
Mortgage escrow funds	5,720	-	$ 5,720	5,209	-	5,209
Total Deposits	$ 578,477	$ 145,126	$ 723,603	$ 481,239	$ 129,744	$ 610,983

NOTE 12: BORROWED FUNDS

The composition of borrowings (excluding subordinated loans) at December 31 is as follows:

(In thousands)	2017	2016
Short-term:		
FHLB Advances	$ 30,600	$ 42,000
Deferred fees hedging	-	(53)
Total short-term borrowings	$ 30,600	$ 41,947
Long-term:		
FHLB advances	$ 43,288	$ 17,000
Total long-term borrowings	$ 43,288	$ 17,000

The principal balances, interest rates and maturities of the outstanding long-term borrowings, all of which are at a fixed rate, at December 31, 2017 are as follows:

Term	Principal	Rates
(Dollars in thousands)		
Advances with FHLB		
Due within 1 year	$ 2,000	1.04%
Due within 2 years	31,228	1.16-2.00%
Due within 10 years	10,060	1.62-2.55%
Total advances with FHLB	$ 43,288	
Total long-term fixed rate borrowings	$ 43,288	

At December 31, 2017, scheduled repayments of long-term debt are as follows:

(In thousands)	
2018	$ 2,000
2019	31,228
2020	7,060
2021	1,000
2022	2,000
Thereafter	-
Total	$ 43,288

The Company has access to Federal Home Loan Bank advances, under which it can borrow at various terms and interest rates. Residential mortgage loans with a carrying value of $148.1 million and FHLB stock with a carrying value of $3.9 million have been pledged by the Company under a blanket collateral agreement to secure the Company's borrowings at December 31, 2017. The total outstanding indebtedness under borrowing facilities with the FHLB cannot exceed the total value of the assets pledged under the blanket collateral agreement. The Company has a $19.9 million line of credit available at December 31, 2017 with the Federal Reserve Bank of New York through its Discount Window and has pledged various corporate and municipal securities against the line. The Company has $14.4 million in lines of credit available with three other correspondent banks. $9.4 million of that line of credit is available on an unsecured basis and the remaining $5.0 million must be collateralized with marketable investment securities. Interest on the lines is determined at the time of borrowing.

NOTE 13: SUBORDINATED LOANS

The Company has a non-consolidated subsidiary trust, Pathfinder Statutory Trust II, of which the Company owns 100% of the common equity. The Trust issued $5,000,000 of 30-year floating rate Company-obligated pooled capital securities of Pathfinder Statutory Trust II ("Floating-Rate Debentures"). The Company borrowed the proceeds of the capital securities from its subsidiary by issuing floating rate junior subordinated deferrable interest debentures having substantially similar terms. The capital securities mature in 2037 and are treated as Tier 1 capital by the Federal Deposit Insurance Corporation and the Federal Reserve Board ("FRB"). The capital securities of the trust are a pooled trust preferred fund of Preferred Term Securities VI, Ltd. and are tied to the 3-month LIBOR (1.69%) plus 1.65% for a total of 3.34% at December 31, 2017 with a five-year call provision. The Company guarantees all of these securities.

The Company's equity interest in the trust subsidiary is included in other assets on the Consolidated Statements of Financial Condition at December 31, 2017 and 2016. For regulatory reporting purposes, the Federal Reserve has indicated that the preferred securities will continue to qualify as Tier 1 Capital subject to previously specified limitations, until further notice. If regulators make a determination that Trust Preferred Securities can no longer be considered in regulatory capital, the securities become callable and the Company may redeem them.

On October 15, 2015, the Company executed the $10.0 million non-amortizing subordinated loan with an unrelated third party that is scheduled to mature on October 1, 2025. The Company has the right to prepay the subordinated loan at any time after October 15, 2020 without penalty. The terms of the subordinated loan required interest payments at an annual interest rate of 3.50% from October 15, 2015 to February 29, 2016. The annual interest rate charged the Company increased to 6.25% on March 1, 2016 through the maturity date. The Subordinated Loan is senior in the Company's credit repayment hierarchy only to the Company's common equity and, as a result, qualifies as Tier 2 capital for all future periods when applicable. The Company paid $172,000 in origination and legal fees as part of this transaction. These fees will be amortized over the life of the subordinated loan through its first call date using the effective interest method. The effective cost of funds related to this transaction is 6.44% calculated under this method.

The composition of subordinated loans at December 31 is as follows:

(In thousands)	2017	2016
Subordinated loans:		
Junior subordinated debenture	$ 5,155	$ 5,155
Subordinated loan	9,904	9,870
Total subordinated loans	$ 15,059	$ 15,025

The principal balances, interest rates and maturities of the subordinated loans at December 31, 2017 are as follows:

Term	Principal	Rates
(Dollars in thousands)		
Subordinated loans:		
Due within 10 years	$ 9,904	6.48%
Due within 20 years	5,155	3-Month Libor + 1.65%
Total subordinated loans	$ 15,059	

At December 31, 2017, scheduled repayments of the subordinated loans:

(In thousands)		
2018	$	-
2019		-
2020		-
2021		-
2022		-
Thereafter		15,059
Total	$	15,059

NOTE 14: EMPLOYEE BENEFITS AND DEFERRED COMPENSATION AND SUPPLEMENTAL RETIREMENT PLANS

The Company has a noncontributory defined benefit pension plan covering substantially all employees. The plan provides defined benefits based on years of service and final average salary. On May 14, 2012, the Company informed its employees of its decision to freeze participation and benefit accruals under the plan, primarily to reduce some of the volatility in earnings that can accompany the maintenance of a defined benefit plan. The plan was frozen on June 30, 2012. Compensation earned by employees up to June 30, 2012 is used for purposes of calculating benefits under the plan but there will be no future benefit accruals after this date. Participants as of June 30, 2012 will continue to earn vesting credit with respect to their frozen accrued benefits as they continue to work. In addition, the Company provides certain health and life insurance benefits for a limited number of eligible retired employees. The healthcare plan is contributory with participants' contributions adjusted annually; the life insurance plan is noncontributory. Employees with less than 14 years of service as of January 1, 1995, are not eligible for the health and life insurance retirement benefits.

The following tables set forth the changes in the plans' benefit obligations, fair value of plan assets and the plans' funded status as of December 31:

	Pension Benefits		Postretirement Benefits	
(In thousands)	2017	2016	2017	2016
Change in benefit obligations:				
Benefit obligations at beginning of year	$ 9,323	$ 9,319	$ 154	$ 159
Service cost	-	-	-	-
Interest cost	473	464	8	8
Actuarial loss (gain)	916	(231)	332	-
Benefits paid	(243)	(229)	(13)	(13)
Benefit obligations at end of year	10,469	9,323	481	154
Change in plan assets:				
Fair value of plan assets at beginning of year	13,634	12,808	-	-
Actual return on plan assets	1,565	1,055	-	-
Benefits paid	(243)	(229)	(13)	(13)
Employer contributions	-	-	13	13
Fair value of plan assets at end of year	14,956	13,634	-	-
Funded Status - asset (liability)	$ 4,487	$ 4,311	$ (481)	$ (154)

The funded status of the pension was recorded within other assets on the statement of condition. The unfunded status of the postretirement plan is recorded as a liability on the statement of condition.

Amounts recognized in accumulated other comprehensive loss as of December 31 are as follows:

	Pension Benefits		Postretirement Benefits	
(In thousands)	2017	2016	2017	2016
Net loss/(gain)	$ 2,827	$ 2,685	$ 176	$ (165)
Tax Effect	1,131	1,074	70	(66)
	$ 1,696	$ 1,611	$ 106	$ (99)

Gains and losses in excess of 10% of the greater of the benefit obligation or the fair value of assets are amortized over the average remaining service period of active participants.

The Company utilized the actual projected cash flows of the participants in both plans for the years ended December 31, 2017 and December 31, 2016. The following points address the approach taken.

1. An analysis of the defined benefit pension plan's expected future cash flows and high-quality fixed income investments currently available and expected to be available during the period to maturity of the pension benefits yielded a single discount rate of 4.58% at December 31, 2017.
2. An analysis of the postretirement health plan's expected future cash flows and high-quality fixed-income investments currently available and expected to be available during the period to maturity of the retiree medical benefits yielded a single discount rate of 4.58% at December 31, 2017.
3. Each discount rate was developed by matching the expected future cash flows of Pathfinder Bank to high quality bonds. Every bond considered has earned ratings of at least AA by Fitch Group, AA by Standard & Poor's, or Aa2 by Moody's Investor Services.

The accumulated benefit obligation for the defined benefit pension plan was $10.5 million and $9.3 million at December 31, 2017 and 2016, respectively. The postretirement plan had an accumulated benefit obligation of $481,000 and $154,000 at December 31, 2017 and 2016, respectively.

The significant assumptions used in determining the benefit obligations as of December 31, are as follows:

	Pension Benefits		Postretirement Benefits	
	2017	2016	2017	2016
Weighted average discount rate	4.58%	5.15%	4.58%	5.32%
Rate of increase in future compensation levels	-	-	-	-

Assumed health care cost trend rates have a significant effect on the amounts reported for the postretirement health care plan. The annual rates of increase in the per capita cost of covered medical and prescription drug benefits for future years were assumed to be 5.00% for 2018, gradually decreasing to 4.50% in 2021 and remain at that level thereafter.

The composition of the net periodic benefit plan cost for the years ended December 31 is as follows:

	Pension Benefits		Postretirement Benefits	
(In thousands)	2017	2016	2017	2016
Service cost	$ -	$ -	$ -	$ -
Interest cost	473	464	8	8
Expected return on plan assets	(945)	(951)	-	-
Amortization of transition obligation	-	-	-	-
Amortization of net losses/(gains)	154	226	(3)	(3)
Amortization of unrecognized past service liability	-	-	(5)	(5)
Net periodic benefit plan benefit	$ (318)	$ (261)	$ -	$ -

The significant assumptions used in determining the net periodic benefit plan cost for years ended December 31, were as follows:

	Pension Benefits		Postretirement Benefits	
	2017	2016	2017	2016
Weighted average discount rate	4.58%	5.05%	4.58%	5.23%
Expected long term rate of return on plan assets	7.00%	7.50%	-	-
Rate of increase in future compensation levels	-	-	-	-

The long term rate of return on assets assumption was set based on historical returns earned by equities and fixed income securities, adjusted to reflect expectations of future returns as applied to the plan's target allocation of asset classes. Equities and fixed income securities were assumed to earn real rates of return in the ranges of 6.0%-8.0% and 3.0%-5.0%, respectively. The long-term inflation rate was estimated to be 2.5%. When these overall return expectations are applied to the plan's target allocation, the expected rate of return was determined to be in the range of 5.0% to 7.0%. Management chose to use a 7.0% expected long-term rate of return in 2017 and a 7.0% expected long-term rate of return in 2018 reflecting current economic conditions and expected rates of return. Based on the $15.0 million fair value of plan assets at December 31, 2017, each 50 basis point decrease in the expected long-term rate of return would reduce after tax net income at 2018 expected marginal tax rate of 26.1% by approximately $55,000.

The estimated net actuarial loss that will be amortized from accumulated other comprehensive loss into net periodic benefit plan income during 2018 is $164,000. The estimated amortization of the unrecognized transition obligation and actuarial loss for the postretirement health plan in 2018 is $13,000. The expected net periodic benefit plan benefit for 2018 is estimated to be $371,000 for both retirement plans in aggregate.

Plan assets are invested in four diversified investment funds of the Pentegra Retirement Trust (the "Trust", formerly known as RSI Retirement Trust). The Trust has been given discretion by the Plan Sponsor to determine the appropriate strategic asset allocation versus plan liabilities, as governed by the Trust's Investment Policy Statement. The Plan is structured to utilize a Liability Driven Investment (LDI) approach which seeks to fund the current and future liabilities of the Plan and aims to mitigate funded status and contribution volatility.

The Plan's asset allocation targets to hold 38% of assets in equity securities via investment in the Long-Term Growth – Equity Portfolio ('LTGE'), 16% in intermediate-term investment grade bonds via investment in the Long-Term Growth – Fixed-Income Portfolio ('LTGFI'), 35% in long duration bonds via the Liability Focused Fixed-Income Portfolio ('LFFI'), 10% in an alternative asset fund (the ALT Portfolio), and 1% in a cash equivalents portfolio (for liquidity).

LTGE is a diversified portfolio that invests in a number of actively and passively managed equity-focused mutual funds and collective investment trusts. The Portfolio holds a diversified mix of equity funds in order to gain exposure to the U.S. and non-U.S. equity markets. LTGFI is a diversified portfolio that invests in a number of fixed-income mutual funds and collective investment trusts. The Portfolio invests primarily in intermediate-term bond funds with a focus on Core Plus fixed-income investment approaches. LFFI is a diversified high quality fixed-income portfolio that currently invests in passively managed collective investment trusts that hold long duration bonds. The ALT Portfolio invests in professionally managed private funds that hold alternative assets. The Portfolio currently invests in long/short equity hedge funds.

The investment objectives, investment strategies and risk of each of the daily valued and unitized Portfolios and the funds held within the Portfolios are detailed in the Private Placement Memorandum and the Trust's Investment Policy Statement.

The overall long-term investment objectives are to maintain plan assets at a level that will sufficiently cover long-term obligations and to generate a return on plan assets that will meet or exceed the rate at which long-term obligations will grow. The LTGE and LTGFI Portfolios are designed to provide long-term growth of equity and fixed-income assets with the objective of achieving an investment return in excess of the cost of funding the active life, deferred vested, and all 30-year term and longer obligations of retired lives in the Trust. The LFFI Portfolio is designed with a relatively long duration and to be correlated with plan liabilities. The ALT Strategy is designed to add diversification via the addition of relatively low correlation assets. Risk/volatility is further managed by the distinct investment objectives of each of the Trust's Portfolios.

In addition, significant consideration is paid to the plan's funding levels when determining the overall asset allocation. If the plan is considered to be well-funded, approximately 65% of the plan's assets are allocated to equities and approximately 35% allocated to fixed-income. Asset rebalancing normally occurs when the equity and fixed-income allocations vary by more than 10% from their respective targets (i.e., a 10% policy range guideline).

Pension plan assets measured at fair value are summarized below:

	At December 31, 2017			
(In thousands)	Level 1	Level 2	Level 3	Total Fair Value
Asset Category:				
Mutual funds - equity				
Large-cap value (a)	$ -	$ 1,058	$ -	$ 1,058
Large-cap Growth (b)	-	1,102	-	1,102
Large-cap Core (c)	-	733	-	733
Mid-cap Value (d)	-	236	-	236
Mid-cap Growth (e)	-	223	-	223
Mid-cap Core (f)	-	239	-	239
Small-cap Value (g)	-	178	-	178
Small-cap Growth (h)	-	169	-	169
Small-cap Core (i)	-	349	-	349
International Equity (j)	-	1,419	-	1,419
Equity -Total	-	5,706	-	5,706
Fixed Income Funds				
Fixed Income-US Core (k)	-	1,713	-	1,695
Intermediate Duration (l)	-	3,075	-	2,932
Long Duration (m)	-	2,630	-	2,474
Fixed Income-Total	-	7,418	-	7,418
Long/Short Equity(n)	-	1,533	-	1,533
Company Common Stock	-	-	-	-
Cash Equivalents-Money market*	58	241	-	299
Total	$ 58	$ 14,898	$ -	$ 14,956

	At December 31, 2016			
(In thousands)	Level 1	Level 2	Level 3	Total Fair Value
Asset Category:				
Mutual funds - equity				
Large-cap value (a)	$ -	$ 958	$ -	$ 958
Large-cap Growth (b)	-	860	-	860
Large-cap Core (c)	-	609	-	609
Mid-cap Value (d)	-	204	-	204
Mid-cap Growth (e)	-	186	-	186
Mid-cap Core (f)	-	209	-	209
Small-cap Value (g)	-	167	-	167
Small-cap Growth (h)	-	140	-	140
Small-cap Core (i)	-	312	-	312
International Equity (j)	-	1,131	-	1,131
Equity -Total	-	4,776	-	4,776
Fixed Income Funds				
Fixed Income-US Core (k)	-	1,695	-	1,695
Intermediate Duration (l)	-	2,932	-	2,932
Long Duration (m)	-	2,474	-	2,474
Fixed Income-Total	-	7,101	-	7,101
Long/Short Equity(n)	-	1,165	-	1,165
Company Common Stock	-	-	-	-
Cash Equivalents-Money market*	70	522	-	592
Total	$ 70	$ 13,564	$ -	$ 13,634

*Includes cash equivalents investments in equity and fixed income strategies

a) This category contains large-cap stocks with above-average yield. The portfolio typically holds between 60 and 70 stocks.
b) This category seeks long-term capital appreciation by investing primarily in large growth companies based in the U.S.
c) This fund tracks the performance of the S&P 500 index by purchasing the securities represented in the index in approximately the same weightings as the index.
d) This category employs an indexing investment approach designed to track the performance of the CRSP US Mid-Cap Value Index.
e) This category employs an indexing investment approach designed to track the performance of the CRSP US Mid-Cap Growth Index.
f) This category seeks to track the performance of the S&P Midcap 400 Index.
g) This category consists of a selection of investments based on the Russell 2000 Value Index.
h) This category consists of a selection of investments based on the Russell 2000 Growth Index.
i) This category consists of an index fund designed to track the Russell 2000, along with a fund investing in readily marketable securities of U.S. companies with market capitalizations within the smallest 10% of the market universe, or smaller than the 1000th largest US company.
j) This category has investments in medium to large non-US companies, including high quality, durable growth companies and companies based in countries with stable economic and political systems. A portion of this category consists of an index fund designed to track the MSC ACWI ex-US Net Dividend Return Index.
k) This category currently includes equal investments in three mutual funds, two of which usually hold at least 80% of fund assets in investment grade fixed income securities, seeking to outperform the Barclays US Aggregate Bond Index while maintaining a similar duration to that index. The third fund targets investments of 50% or more in mortgage-backed securities guaranteed by the US government and its agencies.
l) This category consists mostly of a fund which seeks to track the Barclays Capital US Corporate A or Better 5-20 Year, Bullets only Index, along with a diversified mutual fund holding fixed income securities rated A or better.
m) This category consists of a fund that seeks to approximate the performance of the Barclays Capital US Corporate A or Better, 20+ Year Bullets Only Index over the long term.
n) This category currently invests in three long/short equity hedge funds.

For the fiscal year ending December 31, 2018, the Company expects to contribute approximately $32,000 to the postretirement plan.

The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid from both retirement plans:

(In thousands)	Pension Benefits	Postretirement Benefits	Total
Years ending December 31:			
2018	$ 297	$ 32	$ 329
2019	306	34	340
2020	324	35	359
2021	341	37	378
2022	364	39	403
Years 2023-2027	2,626	140	2,766

The Company also offers a 401(k) plan to its employees. Contributions to this plan by the Company were $333,000 and $300,000 for 2017 and 2016, respectively. In addition, the Company made a $244,000 safe harbor contribution to the plan in 2017.

The Company maintains optional deferred compensation plans for its directors and certain executive officers, whereby fees and income normally received are deferred and paid by the Company based upon a payment schedule commencing at age 65 and continuing monthly for 10 years. Directors must serve on the board for a minimum of 5 years to be eligible for the Plan. At December 31, 2017 and 2016, other liabilities include approximately $2.6 million and $2.4 million, respectively, relating to deferred compensation. Deferred compensation expense for the years ended December 31, 2017 and 2016 amounted to approximately $351,000 and $339,000, respectively.

To assist in the funding of the Company’s benefits under the supplemental executive retirement plan and deferred compensation plans, the Company is the owner of single premium life insurance policies on selected participants. At December 31, 2017 and 2016, the cash surrender values of these policies were $11.7 million and $11.5 million, respectively.

The Bank adopted a Defined Contribution Supplemental Executive Retirement Plan (the “SERP”), effective January 1, 2014. The SERP benefits certain key senior executives of the Bank who are selected by the Board to participate, including our Named Executive Officers. The SERP is intended to provide a benefit from the Bank upon retirement, death, disability or voluntary or involuntary termination of service (other than “for cause”), subject to the requirements of Section 409A of the Internal Revenue Code. Accordingly, the SERP obligates the Bank to make a contribution to each executive’s account on the last business day of each calendar year. In addition, the Bank, may, but is not required to, make additional discretionary contributions to the executive’s accounts from time to time. All executives currently participating in the plan, including the Named Executive Officers, are fully vested in the Bank’s contribution to the plan. In the event the executive is terminated involuntarily or resigns for good reason within 24 months following a change in control, the Bank is required to make additional annual contributions the lesser of: (1) three years or (2) the number of years remaining until the executive’s benefit age, subject to potential reduction to avoid an excess parachute payment under Code Section 280G. In the event of the executive’s death, disability or termination within 24 months after a change in control, the executive’s account will be paid in a lump sum to the executive or his beneficiary, as applicable. In the event the executive is entitled to a benefit from the SERP due to retirement or other termination of employment, the benefit will be paid either in a lump sum or in 10 annual installments as detailed in his or her participant agreement. At December 31, 2017, other liabilities included $631,000 accrued under this plan.

NOTE 15: STOCK BASED COMPENSATION PLANS

All share and per share values have been adjusted, where appropriate, by the 1.6472 exchange rate used in the Conversion and Offering that occurred on October 16, 2014.

April 2010 Stock Option Grants

In June 2011, the board of directors of the Company approved the grant of stock option awards to its directors and executive officers under the 2010 Stock Option Plan that had 247,080 shares authorized for award. A total of 74,124 stock option awards were granted to the nine directors of the Company, at that time, and 123,540 stock option awards, in total, were granted to the Chief Executive Officer and the Company’s then four senior vice presidents. The awards will vest ratably over five years (20% per year for each year of the participant’s service with the Company) and will expire ten years from the date of the grant, or June 2021. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 2.2%; volatility factors of the expected market price of the Company's common stock of 0.45; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.49%. Based upon these assumptions, the weighted average fair value of options granted was $2.29.

In July 2013, the board of directors of the Company approved the grant of 16,472 stock option awards in total to two newly elected directors of the Company. The awards will vest ratably over five years (20% per year for each year of the participant’s service with the Company) and will expire ten years from the date of the grant, or July 2023. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 2.0%; volatility factors of the expected market price of the Company's common stock of 0.45; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.0%. Based upon these assumptions, the weighted average fair value of options granted was $3.69.

In November 2015, the board of directors of the Company approved the grant of 16,472 stock option awards in total to two newly elected directors of the Company. The awards will vest ratably over five years (20% per year for each year of the participant’s service with the Company) and will expire ten years from the date of the grant, or November 2025. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 1.9%; volatility factors of the expected market price of the Company's common stock of 0.23; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.4%. Based upon these assumptions, the weighted average fair value of options granted was $2.56.

In April 2016, the board of directors of the Company approved the grant of 47,768 stock option awards in total to three officers and one recently promoted senior officer. The awards will vest ratably over five years (20% per year for each year of the participant’s service with the Company) and will expire ten years from the date of the grant, or April 2026. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 1.6%; volatility factors of the expected market price of the Company's common stock of 0.32; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.55%. Based upon these assumptions, the weighted average fair value of options granted was $3.17.

May 2016 Stock Option Grants

In May 2016, the board of directors of the Company approved the grant of stock option awards to its directors, executive Officers, senior officers and officers under the 2016 Equity Incentive Plan that was approved at the Annual Meeting of Shareholders on May 4, 2016 when 263,605 shares were authorized for award.

A total of 79,083 stock option awards were granted to the nine directors of the Company and 44,812 stock option awards, in total, were granted to thirteen officers. The awards will vest ratably over five years (20% per year for each year of the participant's service with the Company) and will expire ten years from the date of the grant, or May 2026. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 1.6%; volatility factors of the expected market price of the Company's common stock of 0.32; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.55%. Based upon these assumptions, the weighted average fair value of options granted was $3.32.

A total of 92,261 stock option awards were granted to the Chief Executive Officer, two executive officers and three senior officers. The awards will vest ratably over seven years (approximately 14.28% per year for each year of the participant's service with the Company) with the exception of one senior officer whose awards vested upon retirement on August 1, 2017 and will expire ten years from the date of the grant, or May 2026. The fair value of each option grant was established at the date of grant using the Black-Scholes option pricing model. The Black-Scholes model used the following weighted average assumptions: risk-free interest rate of 1.7%; volatility factors of the expected market price of the Company's common stock of 0.32; weighted average expected lives of the options of 7.0 years: cash dividend yield of 1.55%. Based upon these assumptions, the weighted average fair value of options granted was $3.59.

Activity in the stock option plans is as follows:

(Shares in thousands)	Options Outstanding	Weighted Average Exercise Price	Shares Exercisable
Outstanding at December 31, 2015	185	$ 5.75	128
Granted	264	$ 11.25	-
Newly vested	-	6.21	37
Exercised	(26)	-	(26)
Expired	-	-	-
Outstanding at December 31, 2016	423	$ 6.21	139
Granted	-	$ -	-
Newly vested	-	10.92	57
Exercised	(28)	-	(28)
Expired	-	-	-
Outstanding at December 31, 2017	395	$ 10.92	168

The aggregate intrinsic value of a stock option represents the total pre-tax intrinsic value (the amount by which the current market value of the underlying stock exceeds the exercise price of the option) that would have been received by the option holders had all option holders exercised their options prior to the expiration date. The intrinsic value can change based on fluctuations in the market value of the Company's stock. At December 31, 2017, the intrinsic value of the stock options was $2.3 million. At December 31, 2016, the intrinsic value of the stock options was $1.7 million.

At December 31, 2017, there were 395,177 options outstanding, of which 167,835 were exercisable at an average exercise price of $7.61, and an average remaining contractual life of 5.3 years.

May 2016 Restricted Stock Unit Grants

In May 2016, the board of directors of the Company approved the grant of restricted stock units to its directors, executive officers, senior officers and officers under the 2016 Equity Incentive Plan that was approved at the Annual Meeting of

Shareholders on May 4, 2016 when 105,442 shares were authorized for award. A total of 31,635 restricted stock units were granted to the nine directors of the Company and 8,436 restricted stock units, in total, were granted to two officers. The units will vest ratably over five years (20% per year for each year of the participant's service with the Company).

A total of 46,570 restricted stock units, in total, were granted to the Chief Executive Officer, two executive officers and three senior officers. The units will vest ratably over seven years (approximately 14.28% per year for each year of the participant's service with the Company) with the exception of one senior officer whose units vested upon retirement on August 1, 2017.

The compensation expense of the stock option awards and restricted stock units is based on the fair value of the instruments on the date of grant. The Company recorded compensation expense in the amount of $345,000 and $264,000 in 2017 and 2016, respectively, and is expected to record $320,000, $313,000, $312,000, $173,000, $110,000 and $37,000 in 2018 through 2023.

NOTE 16: EMPLOYEE STOCK OWNERSHIP PLAN

The Bank established the Pathfinder Bank Employee Stock Ownership Plan ("Plan") to purchase stock of the Company for the benefit of its employees. In July 2011, the Plan received a $1.1 million loan from Community Bank, N.A., guaranteed by the Company, to fund the Plan's purchase of 125,000 shares of the Company's treasury stock. The loan was being repaid in equal quarterly installments of principal plus interest over ten years beginning October 1, 2011. Interest accrued at the Wall Street Journal Prime Rate plus 1.00%, and was secured by the unallocated shares of the ESOP stock. This loan was refinanced in connection with the Conversion and Offering that occurred on October 16, 2014.

In connection with the Conversion and Offering, the ESOP purchased 105,442 shares issued in the offering by obtaining a loan from the Company which was used to purchase both the additional shares and refinance the remaining outstanding balance on the loan from Community Bank N.A. There were 138,982.5 shares associated with the refinanced loan resulting in a total of 244,424.5 shares associated with the new loan provided by the Company.

The ESOP loan from the Company has a ten year term and is being repaid in equal payments of principal and interest under a fixed rate of interest equal to 3.25% which was the prime rate of interest on the date of the closing of the offering. This ESOP loan from the Company, also referred to as an internally leveraged ESOP, does not appear as a liability on the Company's consolidated statement of condition as of December 31, 2017 in accordance with ASC 718-40-25-9d.

In accordance with the payment of principal on the loan, a proportionate number of shares are allocated to the employees over the ten year time horizon of the loan. Participants' vesting interest in the shares of Company stock is at the rate of 20% per year. Compensation expense is recorded based on the number of shares released to the participants times the average market value of the Company's stock over that same period. Dividends on unallocated shares, recorded as compensation expense on the income statement, are made available to the participants' account. The Company recorded $404,000 and $333,000 in compensation expense in 2017 and 2016, respectively, including $37,000 and $40,000 for dividends on unallocated shares in these same time periods. At December 31, 2017, there were 164,987 unearned ESOP shares with a fair value of $2.5 million.

NOTE 17: INCOME TAXES

The provision for income taxes for the years ended December 31, is as follows:

(In thousands)	2017	2016
Current	$ 1,022	$ 1,360
Deferred	(100)	(249)
	$ 922	$ 1,111

The provision for income taxes includes the following

(In thousands)	2017	2016
Federal Income Tax	$ 741	$ 980
State Tax	181	131
	$ 922	$ 1,111

The components of the net deferred tax asset, included in other assets as of December 31, are as follows:

(In thousands)	2017	2016
Assets:		
Deferred compensation	$ 847	$ 912
Allowance for loan losses	1,862	2,392
Postretirement benefits	126	56
Subordinated loan interest	23	37
Investment securities and financial derivative	551	1,229
Impairment losses on investment securities	-	88
Loan origination fees	108	184
Capital loss carryforward	-	62
Held-to-maturity securities	153	310
Other	212	166
Total	3,882	5,436
Liabilities:		
Prepaid pension	(1,173)	(1,605)
Depreciation	(968)	(1,083)
Accretion	(120)	(211)
Intangible assets	(1,004)	(1,470)
Mortgage servicing rights	(7)	(15)
Prepaid expenses and transaction fees	(79)	(204)
Total	(3,351)	(4,588)
	531	848
Less: deferred tax asset valuation allowance	-	(150)
Net deferred tax asset	$ 531	$ 698

Realization of deferred tax assets is dependent upon the generation of future taxable income or the existence of sufficient taxable income within the carry back period. A valuation allowance is provided when it is more likely than not that some portion, or all of the deferred tax assets, will not be realized. In assessing the need for a valuation allowance, management considers the scheduled reversal of the deferred tax liabilities, the level of historical taxable income and the projected future level of taxable income over the periods in which the temporary differences comprising the deferred tax assets will be deductible.

Deferred income tax assets and liabilities are determined using the liability method. Under this method, the net deferred tax asset or liability is recognized for the future tax consequences. This is attributable to the differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases as well as net operating and capital loss carry forwards. Deferred tax assets and liabilities are measured using enacted tax rates applied to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income tax expense in the period that includes the enactment date. If current available evidence about the future raises doubt about the likelihood of a deferred tax asset being realized, a valuation allowance is established. The judgment about the level of future taxable income, including that which is considered capital, is inherently subjective and is reviewed on a continual basis as regulatory and business factors change. In prior years, management believed that it may not have been able to generate sufficient future taxable income in the form of capital gains to offset its capital loss carry forward position before those potential tax benefits expired. Accordingly, a valuation allowance of $150,000 was maintained at December 31, 2016. During 2017, the Company recognized net capital gains of $428,000, effectively utilizing all capital loss carryforward tax benefits established in prior years and thereby eliminating the need for any valuation allowance related to the future utilization of those carryforwards at December 31, 2017. As a result, the Company maintained no valuation allowance related to future tax benefits related to the utilization of capital loss carryforwards at December 31, 2017.

On December 22, 2017 the Tax Act was signed into law. The Tax Act instituted significant changes to various sections of the Internal Revenue Code that effects the Company. Most notably, the Tax Act reduces the Company's marginal federal income tax rate from 34% to 21% starting January 1, 2018. Generally Accepted Accounting Principles ("GAAP") requires that the impact of the provisions of the Tax Act be accounted for in the period of enactment. Accordingly, the Company recorded an income tax benefit in the fourth quarter of 2017 related to the Tax Act in the amount of $155,000. The reduction in income tax expense was largely attributable to the reduction in the value of net deferred tax assets and liabilities reflecting lower future tax obligations resulting from the Tax Act's enacted lower federal corporate tax rate.

A reconciliation of the federal statutory income tax rate to the effective income tax rate for the years ended December 31, is as follows:

	2017	2016
Federal statutory income tax rate	34.0 %	34.0 %
State tax, net of federal benefit	2.9	1.9
Tax-exempt interest income	(11.2)	(8.6)
Increase in value of bank owned life insurance less premiums paid	(2.0)	(2.0)
Change in valuation allowance	(3.5)	(2.6)
Remeasurement of net deferred tax assets for tax rate reduction - Tax Cuts & Jobs Act	(3.5)	-
Other	4.5	2.5
Effective income tax rate - Pathfinder Bancorp, Inc.	21.2 %	25.2 %
Minority interest	(0.6)	0.3
Effective income tax rate	20.6 %	25.5 %

NOTE 18: COMMITMENTS AND CONTINGENCIES

The Company is a party to financial instruments with off-balance sheet risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit and standby letters of credit. Such commitments involve, to varying degrees, elements of credit risk in excess of the amount recognized in the consolidated statement of condition. The contractual amount of those commitments to extend credit reflects the extent of involvement the Company has in this particular class of financial instrument. The Company's exposure to credit loss in the event of nonperformance by the other party to the financial instrument for commitments to extend credit is represented by the contractual amount of the instrument. The Company uses the same credit policies in making commitments as it does for on-balance sheet instruments.

At December 31, 2017 and 2016, the following financial instruments were outstanding whose contract amounts represent credit risk:

	Contract Amount	
(In thousands)	2017	2016
Commitments to grant loans	$ 58,235	$ 46,649
Unfunded commitments under lines of credit	62,879	48,653
Unfunded commitments related to construction loans in progress	3,506	5,918
Standby letters of credit	2,153	1,900

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Commitments generally have fixed expiration dates or other termination clauses and may require payment of a fee. Since some of the commitment amounts are expected to expire without being drawn upon, the total commitment amounts do not necessarily represent future cash requirements. The Company evaluates each customer's creditworthiness on a case-by-case basis. The amount of collateral obtained, if deemed necessary by the Company upon extension of credit, is based on management's credit evaluation of the counter party. Collateral held varies but may include residential real estate and income-producing commercial properties. Loan commitments outstanding at December 31, 2017 with fixed interest rates amounted to approximately $11.1 million. Loan commitments, including unused lines of credit and standby letters of credit, outstanding at December 31, 2017 with variable interest rates amounted to approximately $112.2 million. These outstanding loan commitments carry current market rates.

Unfunded commitments under standby letters of credit, revolving credit lines and overdraft protection agreements are commitments for possible future extensions of credit to existing customers. These lines of credit usually do not contain a specified maturity date and may not be drawn upon to the total extent to which the Company is committed.

Letters of credit written are conditional commitments issued by the Company to guarantee the performance of a customer to a third party. Generally, all letters of credit, when issued have expiration dates within one year. The credit risk involved in issuing letters of credit is essentially the same as those that are involved in extending loan facilities to customers. The Company generally holds collateral and/or personal guarantees supporting these commitments. Management believes that the proceeds obtained through a liquidation of collateral and the enforcement of guarantees would be sufficient to cover the potential amount of future payments required under the corresponding guarantees.

The Company leases land and leasehold improvements under agreements that expire in various years with renewal options over the next 30 years. Rental expense, included in building occupancy expense, amounted to $166,000 for 2017 and $149,000 for 2016.

Approximate minimum rental commitments for non-cancelable operating leases are as follows:

Years Ending December 31:		
(In thousands)		
2018		203
2019		184
2020		170
2021		145
2022		136
Thereafter		301
Total minimum lease payments	$	1,139

NOTE 19: DIVIDENDS AND RESTRICTIONS

The Company's ability to pay dividends to its shareholders is largely dependent on the Bank's ability to pay dividends to the Company. In addition to state law requirements and the capital requirements discussed in Note 20, federal statutes, regulations and policies limit the circumstances under which the Bank may pay dividends. The amount of retained earnings legally available under these regulations approximated $11.6 million as of December 31, 2017. Dividends paid by the Bank to the Company would be prohibited if the effect thereof would cause the Bank’s capital to be reduced below applicable minimum capital requirements. The Bank made no dividend payments to the Company in the years ended December 31, 2017, December 31, 2016 or December 31, 2015.

Capital adequacy is evaluated primarily by the use of ratios which measure capital against total assets, as well as against total assets that are weighted based on defined risk characteristics. The Company’s goal is to maintain a strong capital position, consistent with the risk profile of its banking operations. This strong capital position serves to support growth and expansion activities while at the same time exceeding regulatory standards. At December 31, 2017, the Bank met the regulatory definition of a “well-capitalized” institution, i.e. a leverage capital ratio exceeding 5%, a Tier 1 risk-based capital ratio exceeding 8%, Tier 1 common equity exceeding 6.5%, and a total risk-based capital ratio exceeding 10%.

In addition to establishing the minimum regulatory capital requirements, the regulations limit capital distributions and certain discretionary bonus payments to management if the institution does not hold a “capital conservation buffer” consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets above the amount necessary to meet its minimum risk-based capital requirements. The buffer is separate from the capital ratios required under the Prompt Corrective Action (“PCA”) standards. In order to avoid these restrictions, the capital conservation buffer effectively increases the minimum the following capital to risk-weighted assets ratios: (1) Core Capital, (2) Total Capital and (3) Common Equity. The capital conservation buffer requirement began being phased in beginning January 1, 2016 at 0.625% of risk-weighted assets and increasing each year until fully implemented at 2.5% on January 1, 2019. At December 31, 2017, the Bank exceeded all current and projected regulatory required minimum capital ratios, including the maximum capital buffer level that will be required on January 1, 2019.

NOTE 20: REGULATORY MATTERS

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

Quantitative measures established by regulation to ensure capital adequacy require the Bank to maintain amounts and ratios (set forth in the table below) of total and Tier 1 capital (as defined in the regulations) to risk-weighted assets (as defined), and of Tier 1 capital (as defined) to average assets (as defined).

As of December 31, 2017, the Bank's most recent notification from the Federal Deposit Insurance Corporation categorized the Bank as "well-capitalized", under the regulatory framework for prompt corrective action. To be categorized as "well-capitalized", the Bank must maintain total risk-based, Tier 1 risk-based and Tier 1 leverage ratios as set forth in the tables below. There are no conditions or events since that notification that management believes have changed the Bank's category.

As noted above, the regulations also impose a "capital conservation buffer" consisting of 2.5% of common equity Tier 1 capital to risk-weighted assets above the amount necessary to meet its minimum risk-based capital requirements. The buffer is separate from the capital ratios required under the Prompt Corrective Action ("PCA") standards and imposes restrictions on dividend distributions and discretionary bonuses. In order to avoid these restrictions, the capital conservation buffer effectively increases the minimum the following capital to risk-weighted assets ratios: (1) Core Capital, (2) Total Capital and (3) Common Equity. The capital conservation buffer requirement began being phased in beginning January 1, 2016 at 0.625% of risk-weighted assets and increasing each year until fully implemented at 2.5% on January 1, 2019. At December 31, 2017, the Bank exceeded all current and projected regulatory required minimum capital ratios, including the maximum capital buffer level that will be required on January 1, 2019.

The Bank's actual capital amounts and ratios as of December 31, 2017 and 2016 are presented in the following table.

	Actual		Minimum For Capital Adequacy Purposes		Minimum To Be "Well-Capitalized" Under Prompt Corrective Provisions		Well-Capitalized With Buffer, Fully Phased In 2019	
(Dollars in thousands)	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
As of December 31, 2017:								
Total Core Capital (to Risk-Weighted Assets)	$78,105	13.97%	$44,733	8.00%	$55,916	10.00%	$58,712	10.50%
Tier 1 Capital (to Risk-Weighted Assets)	$71,114	12.72%	$33,550	6.00%	$44,733	8.00%	$47,529	8.50%
Tier 1 Common Equity (to Risk-Weighted Assets)	$71,114	12.72%	$25,162	4.50%	$36,345	6.50%	$39,141	7.00%
Tier 1 Capital (to Assets)	$71,114	8.16%	$34,863	4.00%	$43,579	5.00%	$43,579	5.00%
As of December 31, 2016:								
Total Core Capital (to Risk-Weighted Assets)	$72,098	14.79%	$38,996	8.00%	$48,745	10.00%	$51,182	10.50%
Tier 1 Capital (to Risk-Weighted Assets)	$66,003	13.54%	$29,247	6.00%	$38,996	8.00%	$41,433	8.50%
Tier 1 Common Equity (to Risk-Weighted Assets)	$66,003	13.54%	$21,935	4.50%	$31,684	6.50%	$34,121	7.00%
Tier 1 Capital (to Assets)	$66,003	9.06%	$29,154	4.00%	$36,443	5.00%	$36,443	5.00%

On September 1, 2011, the Company entered into a Securities Purchase Agreement with the Secretary of the Treasury ("Treasury") pursuant to which the Company sold to the Treasury, 13,000 shares of its Senior Non-Cumulative Perpetual Preferred Stock, Series B ("Series B Preferred Stock"), having a liquidation preference of $1,000 per share for aggregate proceeds of $13.0 million. This transaction was entered into as part of the SBLF.

The Series B Preferred Stock was entitled to receive non-cumulative dividends payable quarterly, on each January 1, April 1, July 1 and October 1, beginning October 1, 2011. The dividend rate, which was calculated on the aggregate liquidation amount, was initially set at 4.2% per annum based upon the level of "Qualified Small Business Lending," or "QSBL" (as defined in the Securities Purchase Agreement) by Pathfinder Bank. The dividend rate for dividend periods subsequent to the initial period was set based upon the "Percentage Change in Qualified Lending" (as defined in the Securities Purchase Agreement) between each dividend period and the "Baseline" QSBL level. In general, the dividend rate decreased as the level of Pathfinder Bank's QSBL increased. Our dividend rate as of December 31, 2015 was 1.0%. Such dividends were not cumulative, but we could only declare and pay dividends on our common stock (or any other equity securities junior to the Series B Preferred Stock) if we have declared and paid dividends for the current dividend period on the Series B Preferred Stock. We were also subject to other restrictions on our ability to repurchase or redeem other securities.

The Company had the right to redeem the shares of Series B Preferred Stock, in whole or in part, at any time at a redemption price equal to the sum of the liquidation amount per share and the per-share amount of any unpaid dividends for the then-current period, subject to any required prior approval by its primary federal regulator. On February 16, 2016, the Company redeemed all 13,000 shares of the Series B Preferred Stock outstanding with the payment of $13.0 million to the SBLF. This redemption was substantially financed by the issuance of the $10 million Subordinated Loan on October 15, 2015. The issuance of the Subordinated Loan increased interest expense by $644,000 per year but prospectively reduced the amount payable to the SBLF in preferred stock dividends. Effective April 1, 2016, the annual dividend rate for the preferred stock would have been 9.0%. The retirement of the $13.0 million of the SBLF Preferred Series B stock, therefore resulted in an annual reduction of preferred dividends payable of $1.2 million. The Company paid $0 and $16,000 in preferred dividends in 2017 and 2016, respectively. These transactions had no effect on the regulatory capital position of the Bank.

The Company's goal is to maintain a strong capital position, consistent with the risk profile of its subsidiary banks that supports growth and expansion activities while at the same time exceeding regulatory standards. At December 31, 2017, the Bank exceeded all regulatory required minimum capital ratios and met the regulatory definition of a "well-capitalized" institution, i.e. a leverage capital ratio exceeding 5%, a Tier 1 risk-based capital ratio exceeding 6% and a total risk-based capital ratio exceeding 10%.

The Bank is required to maintain average balances on hand or with the Federal Reserve Bank. At December 31, 2017 and 2016, these reserve balances amounted to $6.3 million and $13.2 million, respectively and are included in cash and due from banks in the statement of condition.

NOTE 21: INTEREST RATE DERIVATIVE

Derivative instruments are entered into primarily as a risk management tool of the Company. Financial derivatives are recorded at fair value as other liabilities. The accounting for changes in the fair value of a derivative depends on whether it has been designated and qualifies as part of a hedging relationship. For a fair value hedge, changes in the fair value of the derivative instrument and changes in the fair value of the hedged asset or liability are recognized currently in earnings. For a cash flow hedge, changes in the fair value of the derivative instrument, to the extent that it is effective, are recorded in other comprehensive income and subsequently reclassified to earnings as the hedged transaction impacts net income. Any ineffective portion of a cash flow hedge is recognized currently in earnings. See Note 22 for further discussion of the fair value of the interest rate derivative.

The Company has $5.0 million of floating rate trust preferred debt indexed to 3-month LIBOR. As a result, it is exposed to variability in cash flows related to changes in projected interest payments caused by changes in the benchmark interest rate. During the fourth quarter of fiscal 2009, the Company entered into an interest rate swap agreement, with a $2.0 million notional amount, to convert a portion of the floating rate trust preferred debt to a fixed rate for a term of approximately seven years at a rate of 4.96%. This swap agreement expired in the second quarter of 2016 and was not renewed. The derivative, while in effect, was designated as a cash flow hedge. The hedging strategy ensured that changes in cash flows from the derivative would have been highly effective at offsetting changes in interest expense from the hedged exposure.

On five occasions during 2017, the Company sold, and subsequently repurchased, U.S. Treasury securities in the approximate amount of $40.0 million for each transaction. These transactions were intended to act as hedges against rising short-term interest rates. The Company was in controlling possession of, but did not own, the securities at the time of each sale. The securities had been received by the Company, under industry-standard repurchase agreements, from an unrelated third party as collateral for a series of 30-day loans of approximately $40.0 million on each occasion which were made at market rates of interest to that third party. The security sale on each occasion provided the funds necessary to advance the loan to the third party and placed the Company in what is generally described as a "short position" with respect to the sold U.S. Treasury securities. These transactions acted as a hedge against rising short-term interest rates because the price of each sold security would be expected to decline in a rising short-term interest rate environment and could therefore be re-acquired at the conclusion of each 30-day loan period at a price lower than the price at which the securities were originally sold. Short-term generally rates rose over the combined duration of these transactions and, consequently, the Company recognized aggregate gains on the sale and repurchase of the securities in the amounts of $428,000 in 2017. The transactions' gains were characterized as capital gains for tax purposes.

On one occasion during 2016, the Company sold, and subsequently repurchased, a U.S. Treasury securities in the approximate amount of $25.0 million. This transaction was intended to act as a hedge against rising short-term interest rates. The security was received by the Company, under an industry-standard repurchase agreement, from an unrelated third party as collateral for a 30-day loan of approximately $25.0 million which was made at zero interest to that third party. Short-term rates rose over the duration of this transaction and, consequently, the Company recognized a gain on the sale and repurchase of the security in the amounts of $85,000 and a related tax benefit of $34,000 in 2016.

All hedging transactions were closed at December 31, 2017 and 2016 and had no effect on the Company's consolidated financial position on those dates with the exception of deferred fees for consulting services related to the transactions in the amount of $53,000 at December 31, 2016. These deferred fees were recognized in other assets at December 31, 2016 and as a component of interest expense in 2017.

NOTE 22: FAIR VALUE MEASUREMENTS AND DISCLOSURES

Accounting guidance related to fair value measurements and disclosures specifies a hierarchy of valuation techniques based on whether the inputs to those valuation techniques are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect the Company's market assumptions. These two types of inputs have created the following fair value hierarchy:

Level 1 – Quoted prices (unadjusted) for identical assets or liabilities in active markets that the entity has the ability to access as of the measurement date.

Level 2 – Quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets or liabilities in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.

Level 3 – Model-derived valuations in which one or more significant inputs or significant value drivers are unobservable.

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

In determining fair value, the Company utilizes valuation techniques that maximize the use of observable inputs, minimize the use of unobservable inputs, to the extent possible, and considers counterparty credit risk in its assessment of fair value.

The Company used the following methods and significant assumptions to estimate fair value:

Investment securities: The fair values of securities available-for-sale are obtained from an independent third party and are based on quoted prices on nationally recognized securities exchanges where available (Level 1). If quoted prices are not available, fair values are measured by utilizing matrix pricing, which is a mathematical technique used widely in the industry to value debt securities without relying exclusively on quoted prices for specific securities but rather by relying on the securities' relationship to other benchmark quoted securities (Level 2). Management made no adjustment to the fair value quotes that were received from the independent third party pricing service. Level 3 securities are assets whose fair value cannot be determined by using observable measures, such as market prices or pricing models. Level 3 assets are typically very illiquid, and fair values can only be calculated using estimates or risk-adjusted value ranges. Management applies known factors, such as currently applicable discount rates, to the valuation of those investments in order to determine fair value at the reporting date.

Interest rate swap derivative: The fair value of the interest rate swap derivative is obtained from a third party pricing agent and is calculated based on a discounted cash flow model. All future floating cash flows are projected and both floating and fixed cash flows are discounted to the valuation date. The curve utilized for discounting and projecting is built by obtaining publicly available third party market quotes for various swap maturity terms, and therefore is classified within Level 2 of the fair value hierarchy. The swap agreement presented in the accompanying financial statements expired in the second quarter of 2016 and was not renewed.

Impaired loans: Impaired loans are those loans in which the Company has measured impairment based on the fair value of the loan's collateral or the discounted value of expected future cash flows. Fair value is generally determined based upon market value evaluations by third parties of the properties and/or estimates by management of working capital collateral or discounted cash flows based upon expected proceeds. These appraisals may include up to three approaches to value: the sales comparison approach, the income approach (for income-producing property), and the cost approach. Management modifies the appraised values, if needed, to take into account recent developments in the market or other factors, such as, changes in absorption rates or market conditions from the time of valuation and anticipated sales values considering management's plans for disposition. Such modifications to the appraised values could result in lower valuations of such collateral. Estimated costs to sell are based on current amounts of disposal costs for similar assets. These measurements are classified as Level 3 within the valuation hierarchy. Impaired loans are subject to nonrecurring fair value adjustment upon initial recognition or subsequent impairment. A portion of the allowance for loan losses is allocated to impaired loans if the value of such loans is deemed to be less than the unpaid balance.

Foreclosed real estate: Fair values for foreclosed real estate are initially recorded based on market value evaluations by third parties, less costs to sell ("initial cost basis"). Any write-downs required when the related loan receivable is exchanged for the underlying real estate collateral at the time of transfer to foreclosed real estate are charged to the allowance for loan losses. Values are derived from appraisals, similar to impaired loans, of underlying collateral or discounted cash flow analysis. Subsequent to foreclosure, valuations are updated periodically and assets are marked to current fair value, not to exceed the initial cost basis. In the determination of fair value subsequent to foreclosure, management also considers other factors or recent developments, such as, changes in absorption rates and market conditions from the time of valuation and anticipated sales values considering management's plans for disposition. Either change could result in adjustment to lower the property value estimates indicated in the appraisals. These measurements are classified as Level 3 within the fair value hierarchy.

The following tables summarize assets measured at fair value on a recurring basis as of December 31, segregated by the level of valuation inputs within the hierarchy utilized to measure fair value:

	December 31, 2017			
(In thousands)	Level 1	Level 2	Level 3	Total Fair Value
Available-for-Sale Portfolio				
Debt investment securities:				
US Treasury, agencies and GSEs	$ -	$ 41,336	$ -	$ 41,336
State and political subdivisions	-	13,681	-	13,681
Corporate	-	8,600	-	8,600
Asset backed securities	-	6,644	-	6,644
Residential mortgage-backed - US agency	-	35,742	-	35,742
Collateralized mortgage obligations - US agency	-	53,348	-	53,348
Collateralized mortgage obligations - Private label	-	11,052	-	11,052
Equity investment securities:				
Common stock - Financial services industry	-	220	515	735
Total available-for-sale securities	$ -	$ 170,623	$ 515	$ 171,138

	December 31, 2016			
(In thousands)	Level 1	Level 2	Level 3	Total Fair Value
Available-for-Sale Portfolio				
Debt investment securities:				
US Treasury, agencies and GSEs	$ -	$ 24,184	$ -	$ 24,184
State and political subdivisions	-	16,481	-	16,481
Corporate	-	15,195	-	15,195
Asset backed securities	-	6,664	-	6,664
Residential mortgage-backed - US agency	-	30,566	-	30,566
Collateralized mortgage obligations - US agency	-	40,986	-	40,986
Collateralized mortgage obligations - Private label	-	6,577	-	6,577
Equity investment securities:				
Mutual funds:				
Ultra short mortgage fund	626	-	-	626
Common stock - Financial services industry	-	220	456	676
Total available-for-sale securities	$ 626	$ 140,873	$ 456	$ 141,955

The changes in Level 3 assets and liabilities measured at estimated fair value on a recurring basis as of December 31 were as follows:

(In thousands)		Common Stock - Financial Services Industry
Balance - December 31, 2016	$	456
Total gains realized/unrealized:		
Included in earnings		-
Included in other comprehensive income		59
Settlements		-
Sales		-
Balance - December 31, 2017	$	515
Changes in unrealized gains included in earnings related to assets still held at December 31, 2017		-

The following table summarizes the valuation techniques and significant unobservable inputs used for the Company's investments that are categorized within Level 3 of the fair value hierarchy at the indicated dates:

(In thousands)	At December 31, 2017				
Investment Type		Fair Value	Valuation Techniques	Unobservable Input	Weight
Common Stock - Financial Services Industry	$	515	Inputs to comparables	Weight ascribed to comparable companies	100%

(In thousands)	At December 31, 2016				
Investment Type		Fair Value	Valuation Techniques	Unobservable Input	Weight
Common Stock - Financial Services Industry	$	456	Inputs to comparables	Weight ascribed to comparable companies	100%

Certain assets and liabilities are measured at fair value on a nonrecurring basis; that is, the instruments are not measured at fair value on an ongoing basis but are subject to fair value adjustments in certain circumstances (for example, when there is evidence of impairment).

The following tables summarize assets measured at fair value on a nonrecurring basis as of December 31, segregated by the level of valuation inputs within the hierarchy utilized to measure fair value:

	December 31, 2017							
(In thousands)		Level 1		Level 2		Level 3		Total Fair Value
Impaired loans	$	-	$	-	$	4,887	$	4,887
Foreclosed real estate	$	-	$	-	$	434	$	434

	December 31, 2016							
(In thousands)		Level 1		Level 2		Level 3		Total Fair Value
Impaired loans	$	-	$	-	$	4,049	$	4,049
Foreclosed real estate	$	-	$	-	$	393	$	393

The following table presents additional quantitative information about assets measured at fair value on a nonrecurring basis and for which Level 3 inputs were used to determine fair value.

	Quantitative Information about Level 3 Fair Value Measurements		
	Valuation Techniques	Unobservable Input	Range (Weighted Avg.)
At December 31, 2017			
Impaired loans	Appraisal of collateral	Appraisal Adjustments	5% - 30% (9%)
	(Sales Approach)	Costs to Sell	7% - 13% (11%)
	Discounted Cash Flow		
Foreclosed real estate	Appraisal of collateral	Appraisal Adjustments	15% - 15% (15%)
	(Sales Approach)	Costs to Sell	6% - 8% (7%)

	Quantitative Information about Level 3 Fair Value Measurements		
	Valuation Techniques	Unobservable Input	Range (Weighted Avg.)
At December 31, 2016			
Impaired loans	Appraisal of collateral	Appraisal Adjustments	5% - 10% (5%)
	(Sales Approach)	Costs to Sell	8% - 13% (10%)
	Discounted Cash Flow		
Foreclosed real estate	Appraisal of collateral	Appraisal Adjustments	15% - 15% (15%)
	(Sales Approach)	Costs to Sell	6% - 8% (7%)

Required disclosures include fair value information of financial instruments, whether or not recognized in the consolidated statement of condition, for which it is practicable to estimate that value. In cases where quoted market prices are not available, fair values are based on estimates using present value or other valuation techniques. Those techniques are significantly affected by the assumptions used, including the discount rate and estimates of future cash flows. In that regard, the derived fair value estimates cannot be substantiated by comparison to independent markets and, in many cases, could not be realized in immediate settlement of the instrument.

The Company has various processes and controls in place to ensure that fair value is reasonably estimated. The Company performs due diligence procedures over third-party pricing service providers in order to support their use in the valuation process.

While the Company believes its valuation methods are appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could result in a different estimate of fair value at the reporting date.

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

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

Cash and cash equivalents – The carrying amounts of these assets approximate their fair value and are classified as Level 1.

Interest earning time deposits – The carrying amounts of these assets approximate their fair value and are classified as Level 1.

Investment securities – The fair values of securities available-for-sale and held-to-maturity are obtained from an independent third party and are based on quoted prices on nationally recognized exchange where available (Level 1). If quoted prices are not available, fair values are measured by utilizing matrix pricing, which is a mathematical technique used widely in the industry to value debt securities without relying exclusively on quoted prices for specific securities, but rather by relying on the securities' relationship to other benchmark quoted securities (Level 2). Management made no adjustment to the fair value quotes that were received from the independent third party pricing service. Level 3 securities are assets whose fair value cannot be determined by using observable measures, such as market prices or pricing models. Level 3 assets are typically very illiquid, and fair values can only be calculated using estimates or risk-adjusted value ranges. Management applies known factors, such as currently applicable discount rates, to the valuation of those investments in order to determine fair value at the reporting date.

Federal Home Loan Bank stock – The carrying amount of these assets approximates their fair value and are classified as Level 2.

Net loans – For variable-rate loans that re-price frequently, fair value is based on carrying amounts. The fair value of other loans (for example, fixed-rate commercial real estate loans, mortgage loans, and commercial and industrial loans) is estimated using discounted cash flow analysis, based on interest rates currently being offered in the market for loans with similar terms to borrowers of similar credit quality. Loan value estimates include judgments based on expected prepayment rates. The measurement of the fair value of loans, including impaired loans, is classified within Level 3 of the fair value hierarchy.

Accrued interest receivable and payable – The carrying amount of these assets approximates their fair value and are classified as Level 1.

Deposits – The fair values disclosed for demand deposits (e.g., interest-bearing and noninterest-bearing checking, passbook savings and certain types of money management accounts) are, by definition, equal to the amount payable on demand at the reporting date (i.e., their carrying amounts) and are classified within Level 1 of the fair value hierarchy. Fair values for fixed-rate certificates of deposit are estimated using a discounted cash flow calculation that applies interest rates currently being offered in the market on certificates of deposits to a schedule of aggregated expected monthly maturities on time deposits. Measurements of the fair value of time deposits are classified within Level 2 of the fair value hierarchy.

Borrowings – Fixed/variable term "bullet" structures are valued using a replacement cost of funds approach. These borrowings are discounted to the FHLBNY advance curve. Option structured borrowings' fair values are determined by the FHLB for borrowings that include a call or conversion option. If market pricing is not available from this source, current market indications from the FHLBNY are obtained and the borrowings are discounted to the FHLBNY advance curve less an appropriate spread to adjust for the option. These measurements are classified as Level 2 within the fair value hierarchy.

Subordinated Loans – The Company secures quotes from its pricing service based on a discounted cash flow methodology or utilizes observations of recent highly-similar transactions which result in a Level 2 classification.

Interest rate swap derivative – The fair value of the interest rate swap derivative is obtained from a third party pricing agent and is calculated based on a discounted cash flow model. All future floating cash flows are projected and both floating and fixed cash flows are discounted to the valuation date. The curve utilized for discounting and projecting is built by obtaining publicly available third party market quotes for various swap maturity terms, and therefore is classified within Level 2 of the fair value hierarchy. The swap agreement presented in the accompanying financial statements expired in the second quarter of 2016 and was not renewed.

The carrying amounts and fair values of the Company's financial instruments as of December 31 are presented in the following table:

		December 31, 2017		December 31, 2016	
(In thousands)	Fair Value Hierarchy	Carrying Amounts	Estimated Fair Values	Carrying Amounts	Estimated Fair Values
Financial assets:					
Cash and cash equivalents	1	$ 21,991	$ 21,991	$ 22,419	$ 22,419
Investment securities - available-for-sale	1	-	-	626	626
Investment securities - available-for-sale	2	170,623	170,623	140,873	140,873
Investment securities - available-for-sale	3	515	515	456	456
Investment securities - held-to-maturity	2	66,196	66,426	54,645	54,429
Federal Home Loan Bank stock	2	3,855	3,855	3,250	3,250
Net loans	3	573,705	570,439	485,900	484,704
Accrued interest receivable	1	3,047	3,047	2,532	2,532
Financial liabilities:					
Demand Deposits, Savings, NOW and MMDA	1	$ 510,176	$ 510,176	$ 421,627	$ 421,627
Time Deposits	2	213,427	212,453	189,356	189,197
Borrowings	2	73,888	73,575	58,947	58,918
Subordinated loans	2	15,059	14,953	15,025	14,310
Accrued interest payable	1	186	186	75	75

NOTE 23: PARENT COMPANY – FINANCIAL INFORMATION

The following represents the condensed financial information of Pathfinder Bancorp, Inc. as of and for the years ended December 31:

Statements of Condition	2017	2016
(In thousands)		
Assets		
Cash	$ 5,004	$ 5,424
Investments	515	455
Investment in bank subsidiary	71,883	67,281
Investment in non-bank subsidiary	155	155
Other assets	117	475
Total assets	$ 77,674	$ 73,790
Liabilities and Shareholders' Equity		
Accrued liabilities	$ 471	$ 404
Subordinated loans	15,059	15,025
Shareholders' equity	62,144	58,361
Total liabilities and shareholders' equity	$ 77,674	$ 73,790

Statements of Income	2017	2016
(In thousands)		
Income		
Dividends from non-bank subsidiary	$ 4	$ 4
Realized gains on available-for sale investment securities	428	108
Operating, net	15	-
Total income	447	112
Expenses		
Interest	1,371	880
Operating, net	169	230
Total expenses	1,540	1,110
Loss before taxes and equity in undistributed net income of subsidiaries	(1,093)	(998)
Tax benefit	262	254
Loss before equity in undistributed net income of subsidiaries	(831)	(744)
Equity in undistributed net income of subsidiaries	4,322	4,016
Net income	$ 3,491	$ 3,272

Statements of Cash Flows	2017	2016
(In thousands)		
Operating Activities		
Net Income	$ 3,491	$ 3,272
Equity in undistributed net income of subsidiaries	(4,322)	(4,016)
Realized gains on available-for-sale investment securities	-	(23)
Stock based compensation and ESOP expense	712	557
Amortization of deferred financing from subordinated loan	34	34
Net change in other assets and liabilities	822	(152)
Net cash flows from operating activities	737	(328)
Investing Activities		
Purchase investments	-	(130)
Net gain on hedging transaction	(428)	(85)
Proceeds from sale of investment	-	43
Net cash flows from investing activities	(428)	(172)
Financing activities		
Redemption of preferred stock - SBLF	-	(13,000)
Proceeds from exercise of stock options	155	143
Purchase of common stock	-	(1,755)
Cash dividends paid to preferred shareholders	-	(16)
Cash dividends paid to common shareholders	(884)	(866)
Net cash flows from financing activities	(729)	(15,494)
Change in cash and cash equivalents	(420)	(15,994)
Cash and cash equivalents at beginning of year	5,424	21,418
Cash and cash equivalents at end of year	$ 5,004	$ 5,424

NOTE 24: RELATED PARTY TRANSACTIONS

In the ordinary course of business, the Company has granted loans to certain directors, executive officers and their affiliates (collectively referred to as “related parties”). These loans were made on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with other unaffiliated parties and do not involve more than normal risk of collectability.

The following represents the activity associated with loans to related parties during the year ended December 31, 2017:

(In thousands)		
Balance at the beginning of the year	$	10,884
Originations and Officer additions		2,287
Principal payments		(3,899)
Balance at the end of the year	$	9,272

Deposits of related parties at December 31, 2017 and December 31, 2016 were $3.2 million and $3.4 million, respectively.

NOTE 25: CONVERSION AND REORGANIZATION

On October 16, 2014, the former Pathfinder Bancorp (“former Pathfinder”) completed the conversion and reorganization pursuant to which Pathfinder Bancorp, MHC converted to the stock holding company form of organization under a “second step” conversion (the “Conversion”), and the Bank reorganized from the two-tier mutual holding company structure to the stock holding company structure. Prior to the completion of the Conversion, the MHC owned approximately 60.4% of the common stock of the Company. The Company, the new stock holding company for Pathfinder Bank, sold 2,636,053 shares of common stock at $10.00 per share, for gross offering proceeds of $26.4 million in its stock offering. In addition, $197,000 in cash was received by the Company from the MHC upon it ceasing to exist.

Concurrent with the completion of the offering, shares of common stock of the Company owned by the public were exchanged for shares of the Company’s common stock so that the shareholders now own approximately the same percentage of the Company’s common stock as they owned of the former Pathfinder’s common stock immediately prior to the Conversion. Shareholders of the former Pathfinder received 1.6472 shares of the Company’s common stock for each share of the former Pathfinder’s common stock that they owned immediately prior to completion of the transaction. As a result of the offering and the exchange of shares, the Company had 4,353,850 shares outstanding at December 31, 2014. The Company has 4,236,744 and 4,280,227 shares outstanding at December 31, 2016 and December 31, 2017, respectively.

The Conversion was accounted for as a change in corporate form with no resulting change in the historical basis of the Company’s assets, liabilities, and equity. Costs related to the offering were primarily marketing fees paid to the Company’s investment banking firm, legal and professional fees, registration fees, printing and mailing costs and totaled $1.5 million. Accordingly, net proceeds were $24.9 million. In addition, as part of the Conversion and dissolution of the MHC, the Company received $197,000 of cash previously held by the MHC. As a result of the Conversion and Offering, Pathfinder Bancorp, Inc., a federal corporation, was succeeded by a new fully public Maryland corporation with the same name and the MHC ceased to exist.

The shares of common stock sold in the offering and issued began trading on the NASDAQ Capital Market on October 17, 2014 under the trading symbol “PBHC.”

In accordance with Board of Governors of the Federal Reserve System regulations, at the time of the reorganization, the Company substantially restricted retained earnings by establishing a liquidation account. The liquidation account will be maintained for the benefit of eligible account holders who continue to maintain their accounts at the Bank after conversion. The Bank will establish a parallel liquidation account to support the Company’s liquidation account in the event the Company does not have sufficient assets to fund its obligations under its liquidation account. The liquidation accounts will be reduced annually to the extent that eligible account holders have reduced their qualifying deposits. Subsequent increases will not restore an eligible account holder’s interest in the liquidation accounts. In the event of a complete liquidation of the Bank or the Company, each account holder will be entitled to receive a distribution in an amount proportionate to the adjusted qualifying account balances then held.

The Bank may not pay dividends if those dividends would reduce equity capital below the required liquidation account amount.

NOTE 26: ACCUMULATED OTHER COMPREHENSIVE INCOME (LOSS)

Changes in the components of accumulated other comprehensive income (loss) (“AOCI”), net of tax, for the periods indicated are summarized in the table below.

	For the years ended December 31, 2017				
(In thousands)	Retirement Plans	Unrealized Gains and Losses on Financial Derivative	Unrealized Gains and Losses on Available-for-Sale Securities	Unrealized Loss on Securities Transferred to Held-to-Maturity	Total
Beginning balance	$ (1,513)	$ -	$ (1,845)	$ (464)	$ (3,822)
Other comprehensive income before reclassifications	(379)	-	872	115	608
Amounts reclassified from AOCI	89	-	(293)	-	(204)
Reclassification of effect of tax rate change(1)	(417)	-	(292)	(81)	(790)
Ending balance	$ (2,220)	$ -	$ (1,558)	$ (430)	$ (4,208)

(1) Reclassification from accumulated other comprehensive loss to retained earnings for stranded tax effects resulting from the newly enacted Federal corporate income tax rate reduction from 34% to 21%.

	For the years ended December 31, 2016				
(In thousands)	Retirement Plans	Unrealized Gains and Losses on Financial Derivative	Unrealized Gains and Losses on Available-for-Sale Securities	Unrealized Loss on Securities Transferred to Held-to-Maturity	Total
Beginning balance	$ (1,844)	$ (16)	$ (51)	$ (654)	(2,565)
Other comprehensive income before reclassifications	198	1	(1,436)	190	(1,047)
Amounts reclassified from AOCI	133	15	(358)	-	(210)
Ending balance	$ (1,513)	$ -	$ (1,845)	$ (464)	$ (3,822)

The following table presents the amounts reclassified out of each component of AOCI for the indicated annual period:

(In thousands)	For the years ended		
Details about AOCI[1] components	December 31, 2017	December 31, 2016	Affected Line Item in the Statement of Income
Unrealized holding gain on financial derivative:			
Reclassification adjustment for interest expense included in net income	$ -	$ (25)	Interest on long term borrowings
	-	10	Provision for income taxes
	$ -	$ (15)	Net Income
Retirement plan items			
Retirement plan net losses recognized in plan expenses[2]	$ (150)	$ (222)	Salaries and employee benefits
	61	89	Provision for income taxes
	$ (89)	$ (133)	Net Income
Available-for-sale securities			
Realized gain on sale of securities	$ 489	$ 594	Net gains on sales and redemptions of investment securities
	(196)	(236)	Provision for income taxes
	$ 293	$ 358	Net Income

ITEM 9: CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE

None.

ITEM 9A: CONTROLS AND PROCEDURES

REPORT OF MANAGEMENT’S RESPONSIBILITY

The Company’s management, including the Company’s principal executive officer and principal financial officer, have evaluated the effectiveness of the Company’s “disclosure controls and procedures,” as such term is defined in Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended, (the “Exchange Act”). Based upon their evaluation, the principal executive officer and principal financial officer concluded that, as of the end of the period covered by this report, the Company’s disclosure controls and procedures were effective for the purpose of ensuring that the information required to be disclosed in the reports that the Company files or submits under the Exchange Act with the Securities and Exchange Commission (the “SEC”) (1) is recorded, processed, summarized and reported within the time periods specified in the SEC’s rules and forms, and (2) is accumulated and communicated to the Company’s management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure.

MANAGEMENT’S REPORT ON INTERNAL CONTROL OVER FINANCIAL REPORTING

Management’s report on internal control over financial reporting is contained in “Item 8 – Financial Statements and Supplementary Data” in this annual report in Form 10-K.

This annual report does not include an attestation report of the Company’s independent registered public accounting firm regarding internal control over financial reporting pursuant to the rules of the SEC that exempts the Company from such attestation and requires only management’s report.

CHANGES IN INTERNAL CONTROL OVER FINANCIAL REPORTING

There were no changes in the Company’s internal control over financial reporting that occurred during the Company’s last fiscal quarter that have materially affected, or are reasonably likely to materially affect, the Company’s internal control over financial reporting.

ITEM 9B: OTHER INFORMATION

None.

PART III

ITEM 10: DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

(a) Information concerning the directors of the Company is incorporated herein by reference to Proposal 1 of the Company’s Proxy Statement for the Annual Meeting of Shareholders.

(b) Information concerning the officers and directors compliance with Section 16(a) of the Securities Exchange Act is incorporated herein by reference to the Company’s Proxy Statement for the Annual Meeting of Shareholders under the caption “Section 16(a) Beneficial Ownership Reporting Compliance”.

(c) Information concerning the Company’s Code of Ethics is incorporated herein by reference to the Company’s Proxy Statement for the Annual Meeting of Shareholders under the caption “Code of Ethics”.

(d) Information concerning the Company’s Audit Committee and “financial expert” thereof is incorporated herein by reference to the Company’s Proxy Statement for the Annual Meeting of Shareholders under the caption “Audit Committee”.

(e) Set forth below is information concerning the Executive Officers of the Company at December 31, 2017.

Name	Age	Positions Held With the Company
Thomas W. Schneider	56	President and Chief Executive Officer
James A. Dowd, CPA	50	Executive Vice President, Chief Operating Officer and Chief Financial Officer
Ronald Tascarella	59	Executive Vice President, Chief Credit Officer
Edward A. Mervine	61	Senior Vice President, General Counsel
Daniel Phillips	53	Senior Vice President, Chief Information Officer

ITEM 11: EXECUTIVE COMPENSATION

(a) Information with respect to management compensation and transactions required under this item is incorporated by reference hereunder in the Company's Proxy Materials for the Annual Meeting of Shareholders under the caption "Compensation Committee".

(a) Information concerning director compensation is incorporated herein by reference to the Company’s Proxy Statement for the Annual Meeting of Shareholders under the caption “Directors Compensation”.

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

The information required by this item is incorporated by reference hereunder in the Company’s Proxy Materials for the Annual Meeting of Shareholders under the caption "Voting Securities and Principal Holders Thereof."

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

The information required by this item is incorporated by reference hereunder in the Company’s Proxy Materials for the Annual Meeting of Shareholders under the captions “Independence and Diversity of Directors” and "Transactions with Certain Related Persons”.

ITEM 14: PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this item is incorporated by reference hereunder in the Company’s Proxy Materials for the Annual Meeting of Shareholders under the caption "Audit and Related Fees".

PART IV

ITEM 15: EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a)(1) Financial Statements - The Company’s consolidated financial statements, for the years ended December 31, 2017 and 2016, together with the Report of Independent Registered Public Accounting Firm are filed as part of this Form 10-K report. See “Item 8: Financial Statements and Supplementary Data.”

(a)(2) Financial Statement Schedules - All financial statement schedules have been omitted as the required information is inapplicable or has been included in “Item 7: Management Discussion and Analysis.”

(b) Exhibits

3.1 Articles of Incorporation of Pathfinder Bancorp, Inc. (Incorporated herein by reference to Exhibit 3.1 to Pathfinder Bancorp, Inc.’s Registration Statement on Form S-1, file no. 333-196676, originally filed on June 11, 2014)

3.2 Bylaws of Pathfinder Bancorp, Inc. (Incorporated herein by reference to Exhibit 3.2 to Pathfinder Bancorp, Inc.’s Registration Statement on Form S-1, file no. 333-196676, filed on June 11, 2014)

4.1 Form of Stock Certificate of Pathfinder Bancorp, Inc. (Incorporated herein by reference to Exhibit 4 to Pathfinder Bancorp, Inc.’s Registration Statement on Form S-1, file no. 333-196676, filed on June 11, 2014)

4.2 Indenture between Pathfinder Bancorp, Inc., a federal corporation, and Wilmington Trust Company, as trustee, dated March 22, 2007 (Incorporated herein by reference to Exhibit 4.1 to Pathfinder Bancorp, Inc.’s Current Report on Form 8-K, file no. 001-36695, filed on October 22, 2014)

4.3 Supplemental Indenture between Pathfinder Bancorp, Inc. and Wilmington Trust Company, as trustee, dated October 16, 2014 (Incorporated herein by reference to Exhibit 4.2 to Pathfinder Bancorp, Inc.’s Current Report on Form 8-K, file no. 001-36695, filed on October 22, 2014)

10.1 2003 Executive Deferred Compensation Plan (Incorporated herein by reference to Exhibit 10.3 to the Company’s Annual Report on Form 10-K for the year ended December 31, 2008 file no. 000-23601, filed on March 27, 2009)

10.2 2003 Trustee Deferred Fee Plan (Incorporated herein by reference to Exhibit 10.4 to the Company’s Annual Report on Form 10-K for the year ended December 31, 2008 file no. 000-23601, filed on March 27, 2009)

10.3 Employment Agreement between Pathfinder Bank and Thomas W. Schneider, President and Chief Executive Officer (Incorporated by reference to Exhibit 10.5 to Pathfinder Bancorp, Inc.'s Annual Report on Form 10-K for the year ended December 31, 2008, file no. 000-23601, filed on March 27, 2009)

10.4 Change of Control Agreement between Pathfinder Bank and Ronald Tascarella (Incorporated by reference to Exhibit 10.7 to Pathfinder Bancorp, Inc.’s Annual Report on Form 10-K for the year ended December 31, 2008, file no. 000-23601, filed on March 27, 2009)

10.5 Change of Control Agreement between Pathfinder Bank and James A. Dowd (Incorporated by reference to Exhibit 10.8 to Pathfinder Bancorp, Inc.’s Annual Report on Form 10-K for the year ended December 31, 2008, file no. 000-23601, filed on March 27, 2009)

10.6 Executive Supplemental Retirement Plan Agreement between Pathfinder Bank and Thomas W. Schneider effective February 24, 2014 (Incorporated by reference to Exhibit 10.13 to Pathfinder Bancorp, Inc.’s Current Report Form 8-K, file no. 000-23601, filed on February 25, 2014)

10.7 Executive Supplemental Retirement Plan Agreement between Pathfinder Bank and James A. Dowd effective February 24, 2014 (Incorporated by reference to Exhibit 10.15 to Pathfinder Bancorp, Inc.’s Current Report Form 8-K, file no. 000-23601, filed on February 25, 2014)

10.8 Amended and Restated Declaration of Trust among Pathfinder Bancorp, Inc., a federal corporation, as Sponsor, Wilmington Trust Company, as Delaware and Institutional Trustee, and the administrative trustees of the Pathfinder Statutory Trust II (Incorporated herein by reference to Exhibit 10.1 to Pathfinder Bancorp, Inc.’s Current Report on Form 8-K, file no. 001-36695, filed on October 22, 2014)

10.9 Amendment two to the Trustee Deferral Fee Plan (Incorporated by reference to Exhibit 10.17 to Pathfinder Bancorp, Inc.’s Annual Report on Form 10-K, file no. 001-36695, filed on March 18, 2015)

10.10 Amendment one to the Executive Deferral Compensation Plan (Incorporated by reference to Exhibit 10.18 to Pathfinder Bancorp, Inc.’s Annual Report on Form 10-K, file no. 001-36695, filed on March 18, 2015)

10.11	Amendment one to the Supplemental Executive Retirement Plan (Incorporated by reference to Exhibit 10.19 to Pathfinder Bancorp, Inc.’s Annual Report on Form 10-K, file no. 001-36695, filed on March 18, 2015)
10.12	Subordinated Loan Agreement (Incorporated herein by reference to Pathfinder Bancorp, Inc.’s Current Report on Form 8-K, file no. 001-36695, filed on October 19, 2015)
10.13	2016 Pathfinder Bancorp, Inc. Equity Incentive Plan (incorporated by reference to Appendix A to Pathfinder Bancorp, Inc.’s Proxy Statement, file no. 001-36695, filed on March 29, 2016.
10.14	Executive Supplemental Retirement Plan Agreement between Pathfinder Bank and Ronald Tascarella effective February 24, 2014 filed herewith.
14	Code of Ethics (Incorporated by reference to Exhibit 14 to Pathfinder Bancorp, Inc.’s Annual Report on Form 10-K for the year ended December 31, 2003, file no. 000-23601, filed on March 31, 2004)
21	Subsidiaries of Registrant
23	Consent of Bonadio & Co., LLP
31.1	Certification of Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Certification of Chief Executive Officer and Chief Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101	Interactive data files pursuant to Rule 405 of Regulation S-T: (i) the Consolidated Statements of Condition as of December 31, 2017 and 2016, (ii) the Consolidated Statements of Income for the years ended December 31, 2017 and 2016, (iii) the Consolidated Statements of Comprehensive Income for the years ended December 31, 2017 and 2016, (iv) the Consolidated Statements of Changes in Shareholders’ Equity for the years ended December 31, 2017 and 2016, (v) the Consolidated Statements of Cash Flows for the years ended December 31, 2017 and 2016, and (vi) the Notes to the Consolidated Financial Statements

ITEM 16: FORM 10-K SUMMARY

None.

Signatures

Pursuant to the requirements of Section 13 of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Pathfinder Bancorp, Inc.

Date: March 30, 2018

By: /s/ Thomas W. Schneider
Thomas W. Schneider
President and Chief Executive Officer

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

By: /s/ Thomas W. Schneider
Thomas W. Schneider, President and
Chief Executive Officer
(Principal Executive Officer)
Date: March 30, 2018

By: /s/ James A. Dowd
James A. Dowd, Executive Vice President, Chief
Operating Officer and Chief Financial Officer
(Principal Financial Officer)
Date: March 30, 2018

By: /s/ Lloyd Stemple
Lloyd Stemple, Director
Date: March 30, 2018

By: /s/ Lisa A. Kimball
Lisa A. Kimball, Vice President and
Controller (Principal Accounting Officer)
Date: March 30, 2018

By: /s/John P. Funiciello
John Funiciello, Director
Date: March 30, 2018

By: /s/ William A. Barclay
William A. Barclay, Director
Date: March 30, 2018

By: /s/ David A. Ayoub
David A. Ayoub, Director
Date: March 30, 2018

By: /s/ Chris R. Burritt
Chris R. Burritt, Director
Date: March 30, 2018

By: /s/ George P. Joyce
George P. Joyce, Director
Date: March 30, 2018

By: /s/ John F. Sharkey
John F. Sharkey, Director
Date: March 30, 2018

By: /s/ Adam C. Gagas
Adam C. Gagas, Director
Date: March 30, 2018

By: /s/ Melanie Littlejohn
Melanie Littlejohn, Director
Date: March 30, 2018

EXHIBIT 21: SUBSIDIARIES OF THE REGISTRANT

Name	State of Incorporation
Pathfinder Bank	New York (direct)
Pathfinder Statutory Trust II	Delaware (direct)
Pathfinder REIT, Inc.	New York (indirect)
Whispering Oaks Development Corp.	New York (indirect)
Pathfinder Risk Management Company Inc.	New York (indirect)
FitzGibbons Agency, LLC (1)	New York (indirect)

(1) Pathfinder Bancorp, Inc. indirectly owns 51% of FitzGibbons Agency, LLC

The Company has evaluated the activities relating to its strategic business units. The controlling interest in the FitzGibbons Agency is dissimilar in nature and management when compared to the Company’s other strategic business units which are judged to be similar in nature and management. The Company has determined that the FitzGibbons Agency is below the reporting threshold in size in accordance with Accounting Standards Codification 280. Accordingly, the Company has determined it has no reportable segments.

EXHIBIT 23: CONSENT OF BONADIO & CO., LLP

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

Pathfinder Bancorp, Inc.
Oswego, New York

We hereby consent to the incorporation by reference in this Annual Report on Form 10-K of Pathfinder Bancorp, Inc. and subsidiaries for the year ended December 31, 2017 of our report dated March 30, 2018 included in its Registration Statement on Form S-8 (No. 333-202081) relating to the consolidated financial statements for the two years ended December 31, 2017.

/s/ Bonadio & Co., LLP
Bonadio & Co., LLP
Syracuse, New York
March 30, 2018

EXHIBIT 31.1: Rule 13a-14(a) / 15d-14(a) Certification of the Chief Executive Officer

Certification of Chief Executive Officer

Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, Thomas W. Schneider, President and Chief Executive Officer, certify that:

1. I have reviewed this Annual report on Form 10-K of Pathfinder 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 consolidated financial statements, and other financial information included in this report, fairly present in all material respects the consolidated financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting, to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles;
    - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:
    - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 30, 2018

/s/ Thomas W. Schneider
Thomas W. Schneider
President and Chief Executive Officer

EXHIBIT 31.2: Rule 13a-14(a) / 15d-14(a) Certification of the Chief Financial Officer

Certification of Chief Financial Officer

Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002

I, James A. Dowd, Executive Vice President, Chief Operating Officer and Chief Financial Officer, certify that:

1. I have reviewed this Annual report on Form 10-K of Pathfinder 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 consolidated financial statements, and other financial information included in this report, fairly present in all material respects the consolidated financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting, to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of consolidated financial statements for external purposes in accordance with generally accepted accounting principles;
    - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors:
    - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

March 30, 2018

/s/ James A. Dowd
James A. Dowd
Executive Vice President, Chief Operating Officer and
Chief Financial Officer

EXHIBIT 32 Section 1350 Certification of the Chief Executive and Chief Financial Officers

Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

Thomas W. Schneider, President and Chief Executive Officer, and James A. Dowd, Executive Vice President, Chief Operating Officer and Chief Financial Officer of Pathfinder Bancorp, Inc. (the "Company"), each certify in his capacity as an officer of the Company that he has reviewed the Annual Report of the Company on Form 10-K for the year ended December 31, 2017 and that to the best of his knowledge:

1. the report fully complies with the requirements of Sections 13(a) of the Securities Exchange Act of 1934; and
2. the information contained in the report fairly presents, in all material respects, the consolidated financial condition and results of operations of the Company.

The purpose of this statement is solely to comply with Title 18, Chapter 63, Section 1350 of the United States Code, as amended by Section 906 of the Sarbanes-Oxley Act of 2002.

March 30, 2018

/s/ Thomas W. Schneider
Thomas W. Schneider
President and Chief Executive Officer

March 30, 2018

/s/ James A. Dowd
James A. Dowd
Executive Vice President, Chief Operating Officer and
Chief Financial Officer

CORPORATE INFORMATION

PATHFINDER BANCORP, INC. BOARD OF DIRECTORS (1)

Chris R. Burritt, Chairman
David A. Ayoub
William A. Barclay
John P. Funiciello
Adam Gagas
George P. Joyce
Melanie Littlejohn
Thomas W. Schneider
John F. Sharkey, III
Lloyd "Buddy" Stemple

PATHFINDER EXECUTIVE OFFICERS

Thomas W. Schneider
President, Chief Executive Officer

James A. Dowd, CPA
Executive Vice President,
Chief Operating Officer, Chief Financial Officer

Ronald Tascarella
Executive Vice President, Chief Credit Officer

Edward A. Mervine, Esq.
Senior Vice President, General Counsel,
Chief Risk Officer, Corporate Secretary

Daniel R. Phillips
Senior Vice President,
Chief Information Officer

Calvin Corriders
Regional President, Syracuse Market

PATHFINDER OFFICERS

Robert Butkowski
First Vice President, Branch Administration

Will O'Brien
First Vice President,
Credit Administration

Walter F. Rusnak
First Vice President, Finance

Beth K. Alfieri
Vice President,
Senior Business Development Officer

Heather Bush
Vice President, Human Resources

Roberta J. Davis
Vice President, Financial Analyst

Karri Hibbert
Vice President, Facilities Manager

Rhonda Hutchins
Vice President, Compliance

Lisa A. Kimball
Vice President, Controller

Mary McConkey
Vice President,
Electronic Commerce Manager

Joseph P. McManus
Vice President, Computer Operations Manager

April Phillips
Vice President, Core Systems/Deposit
Operations Manager

Michael Quenville
Vice President, Business Development Officer

Reyne Pierce
Vice President, Team Leader Residential
and Consumer Lending

Ronald G. Tascarella
Vice President, Commercial Team Leader

John Andrews
Assistant Vice President, Branch Manager

Randall Barnard
Assistant Vice President, Branch Manager

Susan Cahill
Assistant Vice President, Branch Manager

Theresa L. Colburn
Assistant Vice President,
Internal Audit Manager

Jodi DeAugustine
Assistant Vice President, Branch Manager

Jessica DeGrenier
Assistant Vice President,
Commercial Loss Mitigation

Shari Gordon
Assistant Vice President,
Information Security Officer

Lorna Hall
Assistant Vice President, Bank Secrecy
and Security Officer

Laurie L. Lockwood
Assistant Vice President, Assistant Controller,
Benefits Adminstrator

Denise Lyga
Assistant Vice President, Branch Manager

Deana Michaels
Assistant Vice President, Branch Manager

Craig Nessel
Assistant Vice President, Branch Manager

Crystal Rafte
Assistant Vice President, Branch Analyst

Robert Rickert
Assistant Vice President, Retail Loss Mitigation

Paloma Sarkar
Assistant Vice President, Credit Risk
Team Leader

Amy Shaw
Assistant Vice President, Branch Manager

Jennifer Wright, Assistant Vice President
Business Deposit Sales Manager

Sydney DiPierro
Banking Officer Portfolio Manager

Nick Tryniski
Banking Officer Portfolio Manager

CORPORATE HEADQUARTERS

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

ANNUAL MEETING

Friday, May 9, 2018, 10:00 AM
The Lake Ontario Conference and Events Center
25 East First Street
Oswego, NY 13126

STOCK LISTING

The NASDAQ Capital Market
Symbol: PBHC Listing: PathBcp

SPECIAL COUNSEL

Luse Gorman, PC
5335 Wisconsin Avenue N.W.
Suite 400
Washington, D.C. 20015

INDEPENDENT AUDITORS

Bonadio & Co., LLP
432 North Franklin Street, Suite 60
Syracuse, NY 13204

TRANSFER AGENT

Computershare
480 Washington Blvd, 29th Floor
Jersey City, NJ 07310

INVESTOR RELATIONS

Thomas W. Schneider
President, Chief Executive Officer

James A. Dowd, CPA
Executive Vice President,
Chief Operating Officer, Chief Financial Officer

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

GENERAL INQUIRIES AND REPORTS

A copy of the Bank's 2017 Annual Report to the Securities and Exchange Commission, Form 10-K, may be obtained without charge by written request of shareholders to:

Edward A. Mervine, Esq.
Senior Vice President, General Counsel
Corporate Secretary
Pathfinder Bank
214 West First Street
Oswego, NY 13126

A copy of this Annual Report on Form 10K and our 2018 Annual Proxy Statement is also available free of charge on our website at: www.pathfinderbank.com/annualmeeting

The public may read and copy any materials the Company files with the SEC at the SEC's Public Reference Room at 450 Fifth Street, N.W., Washington, D.C. 20549. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. The Company's filings are also available electronically free of charge at the SEC website: http://www.sec.gov and at the Company's website: http://www.pathfinderbank.com

FDIC DISCLAIMER

This Annual Report has not been reviewed or confirmed for accuracy or relevance by the FDIC.

(1) Information concerning the principal occupation of the Directors is available in the Company's Proxy Statement

PathFinder BANCORP, INC.

MAIN OFFICE
214 West First Street
Oswego
(315) 343-0057

PLAZA OFFICE
State Route 104 East
Oswego
(315) 343-4483

DOWNTOWN DRIVE-THRU
34 East Bridge Street
Oswego
(315) 343-2577

MEXICO OFFICE
Norman & Main Streets
Mexico
(315) 963-7248

FULTON OFFICE
5 West First Street South
Fulton
(315) 592-9545

LACONA OFFICE
1897 Harwood Drive
Lacona
(315) 387-3437

CENTRAL SQUARE OFFICE
3025 East Avenue
Central Square
(315) 676-2265

CICERO OFFICE
6194 State Route 31
Cicero
(315) 752-0033

PIKE BLOCK OFFICE
109 West Fayette
Syracuse
(315) 207-8020

UTICA LOAN PRODUCTION OFFICE
200 Genesee Street
Utica
(315) 343-0057

LOCAL. COMMUNITY. TRUST.

WWW.PATHFINDERBANK.COM