Capitalizing on favorable winds.

2018 ANNUAL REPORT AND FINANCIAL STATEMENTS

Canandaigua National Corporation

People, processes, and technology working in harmony to serve our customers and community.

Canandaigua National Corporation took full advantage of favorable circumstances in 2018, demonstrating once again that our smart, dedicated, and agile people can achieve maximum success in any environment.

We made substantial changes to our infrastructure and processes to offer even more value to our customers. The goal is to develop a comprehensive approach across the financial spectrum that allows us to meet every financial need, and sets us apart in the marketplace.

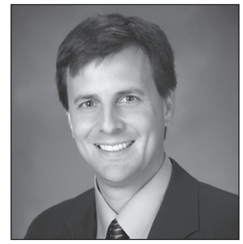
We continued to enhance our technology to improve performance, reliability, and safety for our customers. Going forward, our strategic focus on technology will help us meet customer expectations and future challenges, and capitalize on new opportunities.

Merging Genesee Valley Trust Company and CNB Wealth Strategies Group created the new CNB Wealth Management—with enhanced offerings and improvements in product development, compliance processes, and customer and investment-management tools.

For the second year in a row, we received multiple awards in recognition of our outstanding customer service—which only confirms what we already know: our colleagues are unmatched at meeting the needs of our shareholders, customers, and community.

February 12, 2019

A message from
Frank H. Hamlin, III,
President and CEO



Dear Shareholders,

2018 was extraordinary. From the prior year, net income increased by 63%, diluted earnings per share increased by 64%, return on average assets increased by 53%, and return on average equity increased by 51%. While our performance was certainly commendable, it is important, when contemplating our year-over-year results, to understand some of the contributing factors from non-operational and non-recurring events that helped to drive these results.

You may recall at the end of 2017 that legislation was enacted that resulted in the corporate statutory federal tax rate being reduced to 21% from 35%, effective in 2018. This necessitated a $3.7 million one-time non-cash write-down of our net deferred tax assets in 2017, adversely affecting our financial performance on paper yet obfuscating our true operational performance.

During 2018, a non-recurring, unique transaction occurred whereby USA Payrolls, Inc., which we held a minority ownership interest in, was sold. The gain on sale provided a material, yet unanticipated and unbudgeted, benefit to our 2018 financials of approximately $4.6 million. Approximately 20 years ago we had invested in the development of USA Payrolls in order to improve our product offerings consistent with our comprehensive financial services model. In 2018, USA Payrolls was approached by a number of suitors, which quickly resulted in offers for purchase. In consideration of the market, future technology challenges, and much more, the majority owner agreed to sell the business.

The following presents 2018 results, adjusted for the gain on sale of USA Payrolls, Inc., compared to 2017, adjusted for the impacts of the write-down of our net deferred tax assets:

- Net income for 2018 was $32.5 million (an increase of $6.7 million, or 26%)
- Diluted earnings per share for 2018 was $17.17 (an increase of $3.63, or 27%)
- Return on average assets for 2018 was 1.18% (an increase of 0.18%, or 18%)
- Return on average equity for 2018 was 14.85% (an increase of 2.08%, or 16%)

2018 was also our first full year under the new corporate tax paradigm (21% statutory federal income tax rate). Even when excluding the positive impacts of the lower tax rate, we still comfortably surpassed our 2017 adjusted results, as well as our financial targets for 2018. Normalized income before income taxes increased 7% to $41.4 million in 2018 from $38.8 million in 2017.

The largest factor contributing to our results from an operational performance perspective was the change in the Fed Funds and Prime interest rates in 2018. These rate changes, coupled with greater than expected loan production increased our net interest income, which represents nearly 70% of our revenue. For 2018 budgeting purposes, we had planned on two quarter-point (0.25%) increases, one in June and the other in December. Since the financial crisis, financial forecasters have routinely overestimated annual Fed Funds rate movement; thus, we have taken a conservative position in our planning.

In March 2018, the Federal Reserve (Fed) raised rates by 25 basis points (0.25 %). This resulted in an increase of net interest income three months sooner than anticipated. The rate was increased again in June, continuing the unanticipated increase in interest revenue, and then again in September, accelerating earnings even more. As rates continued to rise throughout the year, we were able to hold commensurate rate increases in interest bearing liabilities fairly steady, further increasing our interest spread. Finally, in December the Fed raised rates 25 basis points (0.25%) again, which did not serve to materially increase our year-end results, yet does set us up as planned for 2019.

Loan production grew approximately 8% year over year and exceeded budget expectations by approximately 4%. In recent history, we have used indirect automobile loans as a way to deploy resources at a greater yield than through our investment portfolio, which kept our capital working in times when commercial demand was lower. In 2018, we started tamping down our indirect lending volume in order to allow for more production in higher-yielding products. Consequently, we increased rates while not compromising on credit quality. This served to improve our overall margin while also moving toward the path of bringing our balance sheet more in line with the 50/50 target mix of commercial loans and consumer loans.

Mortgage production results were softer than anticipated despite holding our market share position. Our market area has been experiencing a reduction in housing inventory, which we expect to continue through 2019. Housing coming onto the market in 2018 tended to move quickly and command top dollar. Although loan production for sale on the secondary market sagged, mortgage lending into our portfolio (on balance sheet) held steady. This demonstrates the customer benefit of our in-house product regardless of market conditions. It is serving a unique clientele, and ensuring they can get their deals done—continuing the legacy of true community banking.

Despite significant internal structural change and a rather severe drop in the securities markets during the last quarter of the year, our Wealth areas grew book value of assets under administration by more than 7%, and revenues increased by more than 8%, which was consistent with our budget for 2018. As our fees are determined by market value of assets under administration, meeting revenue targets in spite of a huge drop in the market is a spectacular feat!

In 2018, we successfully merged our wholly owned subsidiary, Genesee Valley Trust Company (GVT), with CNB Wealth Strategies. This allowed us to eliminate the time, effort, and cost of being supervised by two regulators with different and sometimes inconsistent regulatory requirements. Thus, GVT was merged into CNB's fiduciary compliance paradigm with the Office of the Comptroller of the Currency (OCC) and eliminated continued trust company supervision by the New York State Department of Financial Services (NYSDFS). The previous GVT location was closed and staff were moved to our Basin Park location and to our new location at 600 East Avenue in Rochester.

This new and improved entity was rebranded as CNB Wealth Management. Upon study of our brand, we found that the name "Wealth Strategies" confused potential customers as to our focus. In addition, Internet searches using terms such as "investment," "asset management," etc. failed to return CNB in the results. Rebranding under CNB Wealth Management resolves the ambiguity. This was also an opportunity to incorporate the GVT product set and process to enhance the overall product offerings to our current customer base. Time was spent to focus our investment managers to articulate a common investment philosophy, which has guided us toward improvements in product development, compliance processes, customer and investment manager tools for presentation and analysis, and to simply and clearly market our value proposition.

Enormous attention was focused in our Wealth area upon enhancing our fiduciary compliance system and processes. This was necessary to incorporate assets held by GVT under its New York charter into our OCC fiduciary framework. This process also served as an opportunity to rethink how to better align fiduciary compliance and reporting with fiduciary administration and marketing efforts.

Major progress was made toward improvement in our overall technology infrastructure. We substantially increased our data bandwidth to decrease lag for both our customers and employees. Our disaster recovery and resiliency systems and processes were overhauled to significantly reduce recovery time from potential system failures, whether caused by nature or malicious conduct. True preparedness requires efforts to keep criminals out of our systems, as well as having robust protections and redundancies in place to nullify what they can actually accomplish in the event they manage to penetrate our firewalls.

Concurrent with the above efforts, our Technology and Risk groups worked very closely to ensure compliance with the new New York State Department of Financial Services Cyber Security Regulations. These regulations are relatively new and fairly broad in scope. There is very limited guidance regarding the interpretation of these regulations. Therefore, striking a balance between meeting the intent of the regulations while also meeting the service expectations of our customers and the business needs of our employees is critical. We are very pleased with the finesse demonstrated by both the Risk and the Technology groups in wading through this process.

Improvements in our project management processes continued in 2018 and will be a focus for years to come. Project management implicates a number of different foci, all necessary for an effective overall project management system. This ranges from having specific processes to address technology system patches and upgrades; processes to monitor third-party vendor service levels; systems to ensure our contracts provide recourse when vendors fail to meet said service-level expectations, etc. We started development of our project management office by focusing on technology-based projects due to the nature of technology being a common factor in initiatives throughout the organization. As those processes have matured with experience, we are shifting greater focus to categories of projects where technology has a less prominent role, such as the creation of different and/or enhanced product offerings. This is all in effort to ensure that good ideas are executed to completion in a timely and intentional manner, consistent with our overall strategic goals.

The elevation of technology and project management to executive table status is evidence of the significant importance of technology as an integral component to satisfy customer expectations within the financial services industry. At last count, we are running nearly 250 disparate systems in order to execute on our value proposition. In 2018, we were able to begin formulating a long-term technology strategic plan. Technology has changed considerably in the recent past, providing the opportunity to redeploy in a manner that meets the needs of the organization as a whole in a well-coordinated fashion.

Throughout 2018 we planned for the retirement of our Chief Financial Officer, Larry Heilbronner-Kolthoff, who successfully retired at the year's end. It is important to recognize the enormous growth and the overall success of CNC throughout the 21 years of his stewardship. It is also a testament to our succession planning process that the transition of his varied duties occurred in such an impressive and orderly fashion. Our very own Corporate Controller, Vincent Yacuzzo, took over the role of Chief Financial Officer on January 1, 2019, with Dawn Priolo acting as Director of Finance and Barb Finch as Director of Operations. Although saddened by Mr. Heilbronner-Kolthoff's departure, I am excited to work with Mr. Yacuzzo and his team as we navigate CNC into the future.

For the second year in a row, we were honored with multiple awards from local publications, all in recognition of outstanding customer service. In addition, our 2018 TV advertising campaign won the MarCom Platinum Award, which is an international creative competition that honors outstanding achievement by marketing and communication professionals.

In light of our extraordinary financial success in 2018, it only seemed fair and appropriate to recognize those who have made our success possible. On our annual employee appreciation day in September, we surprised all employees with an additional $1,000 in their paychecks. This bonus payment was not expected and was certainly appreciated. The notes and emails we received were remarkably heartwarming. I am thankful to answer to a Board of Directors, and the shareholders it represents, that provided an opportunity such as this for the employees to share in the fruits of an unusually exceptional year.

Teamwork, discipline, and unwavering dedication to serving our customers and community have guided us well in an economic environment that has brought down giants. Our organization has been operating in the face of continued and varied headwinds, and as always, we have taken these head on with our continually hardworking, value-focused staff. Thank you for your ongoing support of this exceptional organization!

Yours,

Frank H. Hamlin III

Frank H. Hamlin, III
President and CEO

CANANDAIGUA NATIONAL CORPORATION

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2018 Annual Report

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Annual Meeting

The Annual Meeting of Shareholders of Canandaigua National Corporation (the Company) will be held at the Main Office of The Canandaigua National Bank and Trust Company, 72 South Main Street, Canandaigua, NY, 14424; Thursday, April 25, 2019, at 1:00 p.m.

Presented below is a summary of selected financial highlights to display a snapshot of our performance for the past five years. Balance sheet information is as of the year end, while income statement and average balance information is for the full-year period. This and all information concerning our financial performance should be read in conjunction with the Consolidated Financial Statements and Notes thereto.

Financial Highlights
(Dollars in thousands except per share data)

	2018	% Change	2017	2016	2015	2014
Income Statement Information:						
Net interest income	$ 93,307	12.7 %	82,821	76,692	72,852	69,861
Provision for loan losses	7,775	21.5 %	6,400	4,349	5,695	4,590
Non-interest income (1)	52,360	17.4 %	44,618	42,615	39,836	37,522
Operating expenses	91,844	11.7 %	82,219	80,467	75,209	71,703
Income taxes (2)	10,131	(39.7)%	16,790	11,998	10,793	10,466
Net income attributable to CNC	35,912	63.1 %	22,025	22,488	21,064	20,712
Balance Sheet Data - Period End:						
Investments (3)	$ 424,282	5.0 %	404,125	336,737	324,043	285,300
Loans, net	2,306,600	7.8 %	2,139,645	1,940,994	1,832,066	1,720,154
Assets	2,862,493	7.5 %	2,661,716	2,476,109	2,271,509	2,117,469
Deposits	2,240,985	4.8 %	2,138,894	2,043,625	1,815,383	1,728,522
Borrowings (4)	356,869	22.9 %	290,262	212,002	249,195	196,072
Equity	233,659	12.4 %	207,903	194,477	183,606	170,327
Balance Sheet Data - Average:						
Investments (3)	$ 397,446	11.3 %	356,969	316,785	287,571	288,727
Loans, net	2,236,006	9.7 %	2,038,061	1,887,178	1,771,981	1,653,108
Assets	2,768,540	7.0 %	2,588,607	2,371,117	2,199,174	2,052,207
Deposits	2,182,049	4.5 %	2,088,167	1,920,052	1,780,577	1,736,310
Borrowings (4)	326,295	26.9 %	257,183	217,916	220,087	130,386
Equity	219,017	8.3 %	202,166	188,156	174,399	160,564
Asset Under Administration: (5)						
Book value (cost basis)	$ 2,723,804	7.4 %	2,536,458	2,384,877	2,282,952	2,144,170
Market value	3,056,039	(2.3)%	3,128,992	2,787,506	2,576,610	2,557,250
Per Share Data:						
Net income, basic	$ 19.16	63.1 %	11.75	11.97	11.18	11.01
Net income, diluted	18.97	63.8 %	11.58	11.84	11.05	10.84
Cash dividends	4.80	11.6 %	4.30	3.87	3.69	3.51
Book Value	124.85	12.4 %	111.11	103.87	96.77	89.91
Closing stock price (6)	187.54	14.5 %	163.73	153.79	148.72	148.95
Weighted average shares - diluted	1,893,140	(0.5)%	1,902,018	1,899,206	1,907,071	1,910,895
Other ratios:						
Return on average assets	1.30 %	52.9 %	0.85 %	0.95 %	0.96 %	1.01 %
Return on average equity	16.40 %	50.6 %	10.89 %	11.95 %	12.08 %	12.90 %
Return on beginning equity	17.27 %	52.4 %	11.33 %	12.25 %	12.37 %	13.22 %
Dividend payout	25.31 %	(31.9)%	37.14 %	32.68 %	33.41 %	32.38 %
Average equity to average assets	7.91 %	1.3 %	7.81 %	7.94 %	7.93 %	7.82 %
Net interest margin	3.58 %	4.1 %	3.44 %	3.50 %	3.58 %	3.70 %
Efficiency (7)	62.43 %	(2.5)%	64.01 %	66.71 %	65.86 %	65.75 %
Employees (year end)						
Total	556	2.8 %	541	533	530	526
FTE's	516	3.2 %	500	491	486	478

(1) 2018 includes a $4.6 million gain on sale attributable to the minority ownership interest we previously held in USA Payrolls, Inc.
(2) Negatively impacted 2017 by a $3.7 million one-time non-cash write-down of net deferred tax assets upon the December 2017 enactment of the "Tax Cuts and Jobs Act of 2017", which reduced the statutory federal income tax rate to 21% from 35%. The lower tax rate positively impacted 2018.
(3) Includes the Company's investment in Federal Reserve Bank stock and Federal Home Loan Bank stock.
(4) Includes junior subordinated debentures.
(5) These assets are held in a fiduciary or agency capacity for clients and are not included in our balance sheet.
(6) Price is based upon last sealed-bid auction of the respective year, administered by the Bank's Trust Department.
(7) Operating expenses, exclusive of intangible amortization, divided by total revenues.

Our Common Stock

Information about beneficial ownership of the Company's stock by directors and certain officers is set forth in the Company's Proxy Statement for the Annual Meeting of Shareholders. Market value and dividend information is set forth in the table below. The Company currently pays a semi-annual dividend in February and August. We expect to continue to pay cash dividends to our stockholders for the foreseeable future.

While the Company's stock is not actively traded, from time to time, shareholders sell shares to interested persons in sealed-bid public auctions administered by the Company's Trust Department at the request of selling shareholders. Our stock is not listed with a national securities exchange. Due to the limited number of transactions, the quarterly high, low and weighted average sale prices may not be indicative of the actual market value of the Company's stock. The following table sets forth a summary of transactions by selling shareholders and bidders in the Company's common stock during each period for transactions that were administered by the Company's Trust Department. Also included are the book value at quarter end, and semi-annual dividends paid per share since the first quarter of 2014.

	# Shares Sold	Quarterly Average Sales Price	Quarterly High Sales Price	Quarterly Low Sales Price	Quarter-End Book Value	Quarterly Earnings (Diluted)	Dividend Paid
2018							
4th Quarter	3,275	$ 187.54	197.75	185.00	124.85	3.69	-
3rd Quarter	3,850	181.50	200.00	180.00	119.97	6.25	2.50
2nd Quarter	3,811	179.01	185.00	175.00	116.75	4.45	-
1st Quarter	6,603	165.83	176.00	164.50	112.36	4.58	2.30
2017							
4th Quarter	5,120	$ 163.73	179.00	162.20	111.11	1.80	-
3rd Quarter	3,044	161.88	166.00	160.00	110.00	3.48	2.30
2nd Quarter	4,409	159.25	165.00	153.00	108.76	3.08	-
1st Quarter	2,188	153.81	160.30	152.50	105.48	3.23	2.00
2016							
4th Quarter	6,955	$ 152.86	169.02	150.95	103.87	2.95	-
3rd Quarter	2,231	152.22	155.00	149.00	101.90	3.12	1.95
2nd Quarter	5,996	150.88	155.00	146.00	100.75	3.07	-
1st Quarter	1,439	148.57	150.10	146.00	97.77	2.70	1.92
2015							
4th Quarter	3,673	$ 147.33	151.60	141.00	96.77	3.00	-
3rd Quarter	1,880	142.81	150.00	140.00	93.79	3.33	1.86
2nd Quarter	5,704	145.65	151.00	140.00	92.60	2.96	-
1st Quarter	2,809	147.44	153.00	140.00	89.57	1.76	1.83
2014							
4th Quarter	4,449	$ 149.27	156.30	147.00	89.91	2.87	-
3rd Quarter	4,141	150.05	156.78	146.00	87.38	3.53	1.83
2nd Quarter	5,051	149.22	163.03	144.00	85.60	2.39	-
1st Quarter	2,696	151.76	163.00	148.00	83.11	2.05	1.68

Management Report on the Effectiveness of Internal Controls over Financial Reporting

Canandaigua National Corporation and subsidiaries' (the "Company") internal control over financial reporting is a process designed and effected by those charged with governance, management, and other personnel, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of reliable financial statements in accordance with accounting principles generally accepted in the United States of America and financial statements for regulatory reporting purposes, i.e., the Consolidated Financial Statements for Bank Holding Companies (Form FR Y-9C). The Company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with accounting principles generally accepted in the United States of America and financial statements for regulatory reporting purposes, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and directors of the Company; and (3) provide reasonable assurance regarding prevention, or timely detection and correction of unauthorized acquisition, use, or disposition of the Company's assets that could have a material effect on the financial statements.

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

Management is responsible for establishing and maintaining effective internal control over financial reporting including controls. Management assessed the effectiveness of the Company's internal control over financial reporting, including controls over the preparation of regulatory financial statements in accordance with the instructions for the Consolidated Financial Statements for Bank Holding Companies (FR Y-9C), as of December 31, 2018, based on the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control--Integrated Framework (1992)*. Based on that assessment, management concluded that, as of December 31, 2018, the Company's internal control over financial reporting, including controls over the preparation of regulatory financial statements in accordance with the instructions for the Consolidated Financial Statements for Bank Holding Companies, is effective based on the criteria established in *Internal Control--Integrated Framework (1992)*.

Management's assessment to assertion of the effectiveness of internal control over financial reporting, including controls over the preparation of regulatory financial statements in accordance with the instructions for the Consolidated Financial Statements for Bank Holding Companies (FR Y-9C), as of December 31, 2018, has been examined by KPMG LLP, an independent public accounting firm, as stated in their report dated March 4, 2019.

Management is also responsible for complying with federal laws and regulations concerning dividends to insiders, designated by the FDIC as safety and soundness laws and regulations.

Management assessed compliance with the aforementioned designated safety and soundness laws and regulations. Based on this assessment, management believes that the Company complied, in all material respects, with such designated laws and regulations relating to safety and soundness during the year ended December 31, 2018.

March 4, 2019

Frank H. Hamlin III

Vincent K. Yacuzzo

Frank H. Hamlin, III
President and Chief Executive Officer

Vincent K. Yacuzzo
Executive Vice President and Chief Financial Officer

Independent Auditors' Report

The Board of Directors and Stockholders
Canandaigua National Corporation:

Report on Internal Control over Financial Reporting

We have audited Canandaigua National Corporation and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Management's Responsibility for Internal Control over Financial Reporting

Management is responsible for designing, implementing, and maintaining effective internal control over financial reporting, and for its assessment about the effectiveness of internal control over financial reporting, included in the accompanying Management Report on the Effectiveness of Internal Controls over Financial Reporting.

Auditors' Responsibility

Our responsibility is to express an opinion on the entity's internal control over financial reporting based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

An audit of internal control over financial reporting involves performing procedures to obtain audit evidence about whether a material weakness exists. The procedures selected depend on the auditors' judgment, including the assessment of the risks that a material weakness exists. An audit includes obtaining an understanding of internal control over financial reporting and testing and evaluating the design and operating effectiveness of internal control over financial reporting based on the assessed risk.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Definition and Inherent Limitations of Internal Control over Financial Reporting

An entity's internal control over financial reporting is a process effected by those charged with governance, management, and other personnel, designed to provide reasonable assurance regarding the preparation of reliable financial statements in accordance with U.S. generally accepted accounting principles. Because management's assessment and our audit were conducted to meet the reporting requirements of Section 112 of the Federal Deposit Insurance Corporation Improvement Act (FDICIA), our audit of the Company's internal control over financial reporting included controls over the preparation of financial statements in accordance with U.S. generally accepted accounting principles and with the instructions to the Consolidated Financial Statements for Bank Holding Companies (Form FR Y-9C). An entity's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the entity; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with U.S. generally accepted accounting principles, and that receipts and expenditures of the entity are being made only in accordance with authorizations of management and those charged with governance; and (3) provide reasonable assurance regarding prevention, or timely detection and correction of unauthorized acquisition, use, or disposition of the entity's assets that could have a material effect on the financial statements.

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

Opinion

In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2018, based on *Internal Control – Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

Report on Financial Statements

We also have audited, in accordance with auditing standards generally accepted in the United States of America, the consolidated balance sheets of the Company as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, changes in stockholders' equity, and cash flows for the years then ended, and the related notes to the consolidated financial statements, and our report dated March 4, 2019 expressed an unmodified opinion on those consolidated financial statements.

Report on Other Legal and Regulatory Requirements

We do not express an opinion or any other form of assurance on management's statement referring to compliance with laws and regulations.

KPMG LLP

Rochester, New York
March 4, 2019

Independent Auditors' Report

The Board of Directors and Stockholders
Canandaigua National Corporation:

Report on the Financial Statements

We have audited the accompanying consolidated financial statements of Canandaigua National Corporation and its subsidiaries (the Company), which comprise the consolidated balance sheets as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, changes in stockholders' equity, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with U.S. generally accepted accounting principles; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the consolidated financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the consolidated financial statements in order to design audit procedures that are appropriate in the circumstances. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Opinion

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Canandaigua National Corporation and its subsidiaries as of December 31, 2018 and 2017, and the results of their operations and their cash flows for the years then ended in accordance with U.S. generally accepted accounting principles.

Report on Internal Control over Financial Reporting

We also have audited, in accordance with auditing standards generally accepted in the United States of America, the Bank's internal control over financial reporting as of December 31, 2018, based on criteria established in *Internal Control – Integrated Framework (1992)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and our report dated March 4, 2019 expressed an unmodified opinion on the effectiveness of the Company's internal control over financial reporting.

KPMG LLP

Rochester, New York
March 4, 2019

CANANDAIGUA NATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
December 31, 2018 and 2017
(dollars in thousands, except per share data)

	2018	2017
Assets		
Cash and due from banks	$ 48,331	40,874
Interest-bearing deposits with other financial institutions		
of which $461 and $1,852 respectively, is restricted	20,541	14,883
Federal funds sold	452	1,480
Securities:		
- Debt, Available for sale, at fair value	343,199	300,921
- Debt, Held-to-maturity (fair value of $55,227 and $85,131, respectively)	55,277	85,172
- Equity, at fair value at December 31,2018; at cost at December 31, 2017	8,717	4,590
Loans - net	2,306,600	2,139,645
Premises and equipment – net	12,892	13,750
Accrued interest receivable	9,249	7,927
Federal Home Loan Bank stock and Federal Reserve Bank stock	17,089	13,441
Goodwill	15,570	15,570
Intangible assets – net	849	1,387
Other assets	23,727	22,076
Total Assets	$ 2,862,493	2,661,716
Liabilities and Stockholders' Equity		
Deposits:		
Demand		
Non-interest bearing	$ 519,610	539,442
Interest bearing	267,107	255,311
Savings and money market	1,058,364	1,072,692
Time	395,904	271,449
Total deposits	2,240,985	2,138,894
Borrowings	305,322	238,715
Junior subordinated debentures	51,547	51,547
Accrued interest payable and other liabilities	30,980	24,657
Total Liabilities	2,628,834	2,453,813
Canandaigua National Corporation stockholders' equity:		
Preferred stock, $.01 par value; 4,000,000 shares		
authorized, no shares issued or outstanding	-	-
Common stock, $5.00 par value; 16,000,000 shares		
authorized, 1,946,496 shares issued	9,732	9,732
Additional paid-in-capital	12,823	12,772
Retained earnings	227,001	200,693
Treasury stock, at cost (75,387 shares and		
75,783 shares, respectively)	(11,756)	(11,499)
Accumulated other comprehensive loss, net	(4,193)	(3,847)
Total Canandaigua National Corporation Stockholders' Equity	233,607	207,851
Noncontrolling interests	52	52
Total Stockholders' Equity	233,659	207,903
Total Liabilities and Stockholders' Equity	$ 2,862,493	2,661,716

See accompanying notes to consolidated financial statements.

CANANDAIGUA NATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME
Years ended December 31, 2018 and 2017
(dollars in thousands, except per share data)

		2018	2017
Interest income:			
Loans, including fees	$	100,741	86,413
Securities		7,430	5,848
Federal funds sold		18	9
Interest-bearing deposits with other financial institutions		88	643
Total interest income		108,277	92,913
Interest expense:			
Deposits		6,551	3,826
Borrowings		6,104	3,951
Junior subordinated debentures		2,315	2,315
Total interest expense		14,970	10,092
Net interest income		93,307	82,821
Provision for loan losses		7,775	6,400
Net interest income after provision for loan losses		85,532	76,421
Non-interest income:			
Service charges on deposit accounts		17,924	16,695
Trust and investment services		20,272	18,758
Brokerage and investment subadvisory services		3,990	2,975
Net gain on sale of mortgage loans		2,164	2,718
Loan servicing, net		885	881
Loan-related fees		377	349
Loss on securities transactions, net		(4)	(22)
Gain on sale of other investments, net		4,531	-
Other non-interest income		2,221	2,264
Total non-interest income		52,360	44,618
Operating expenses:			
Salaries and employee benefits		55,008	46,651
Technology and data processing		9,173	9,320
Occupancy, net		8,797	8,749
Professional and other services		4,683	4,066
Marketing and public relations		2,834	2,649
Office supplies, printing and postage		1,859	1,860
FDIC insurance		1,417	1,512
Intangible amortization		539	643
Other real estate operations		143	202
Other operating expenses		7,391	6,567
Total operating expenses		91,844	82,219
Income before income taxes		46,048	38,820
Income taxes		10,131	16,790
Net income attributable to noncontrolling interests and Canandaigua National Corporation		35,917	22,030
Net income attributable to noncontrolling interests		5	5
Net income attributable to Canandaigua National Corporation	$	35,912	22,025
Basic earnings per share	$	19.16	11.75
Diluted earnings per share	$	18.97	11.58

See accompanying notes to consolidated financial statements.

CANANDAIGUA NATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Years ended December 31, 2018 and 2017
(dollars in thousands, except share data)

		2018	2017
Net income attributable to noncontrolling interest and Canandaigua National Corporation	$	35,917	22,030
Other comprehensive income:			
Unrealized net interest rate swaps gains arising during the year, net of taxes of $267 and $434 respectively		772	601
Unrealized net securities (losses) gains arising during the year, net of taxes of ($115) and $22 respectively		(373)	34
Reclassification adjustment for realized gains and losses included in "Loss on securities transactions, net" net of taxes of $0 and $0 respectively		-	(1)
Other comprehensive income		399	634
Total comprehensive income	$	36,316	22,664
Comprehensive income attributable to the noncontrolling interests	$	5	5
Comprehensive income attributable to the Company	$	36,311	22,659

See accompanying notes to consolidated financial statements.

CANANDAIGUA NATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
Years ended December 31, 2018 and 2017
(dollars in thousands, except share data)

	Number of Shares Outstanding	Common Stock	Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Loss	Non controlling Interests	Total
Balance at December 31, 2016	1,871,816	$ 9,732	12,751	187,596	(11,175)	(4,481)	54	194,477
Comprehensive income:								
Net income attributable to noncontrolling interest and Canandaigua National Corporation		-	-	22,025	-	-	5	22,030
Other comprehensive income, net of taxes		-	-	-	-	634	-	634
Total comprehensive income		-	-	22,025	-	634	5	22,664
Purchase of treasury stock	(12,154)	-	-	-	(1,939)	-	-	(1,939)
Sale of treasury stock	1,040	-	10	-	150	-	-	160
Shares issued as compensation	1,878	-	11	-	278	-	-	289
Exercise of stock options	8,133	-	-	(861)	1,187	-	-	326
Cash dividend - $4.30 per share	-	-	-	(8,067)	-	-	-	(8,067)
Purchase of noncontrolling interests	-	-	-	-	-	-	(2)	(2)
Dividend to noncontrolling interests	-	-	-	-	-	-	(5)	(5)
Balance at December 31, 2017	1,870,713	$ 9,732	12,772	200,693	(11,499)	(3,847)	52	207,903
Reclassification due to the adoption of ASU 2016-01				(81)		81		-
Reclassification due to the adoption of ASU 2018-02				826		(826)		-
Balance at January 1, 2018	1,870,713	$ 9,732	12,772	201,438	(11,499)	(4,592)	52	207,903
Comprehensive income:								
Net income attributable to noncontrolling interest and Canandaigua National Corporation		-	-	35,912	-	-	5	35,917
Other comprehensive loss, net of taxes		-	-	-	-	399	-	399
Total comprehensive income		-	-	35,912	-	399	5	36,316
Purchase of treasury stock	(16,235)	-	-	-	(2,825)	-	-	(2,825)
Sale of treasury stock	926	-	3	-	148	-	-	151
Shares issued as compensation	1,218	-	5	-	194	-	-	199
Exercise of stock options	14,487	-	43	(1,338)	2,226	-	-	931
Cash dividend - $4.80 per share	-	-	-	(9,011)	-	-	-	(9,011)
Purchase of noncontrolling interests	-	-	-	-	-	-	-	-
Dividend to noncontrolling interests	-	-	-	-	-	-	(5)	(5)
Balance at December 31, 2018	1,871,109	$ 9,732	12,823	227,001	(11,756)	(4,193)	52	233,659

See accompanying notes to consolidated financial statements.

CANANDAIGUA NATIONAL CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
Years ended December 31, 2018 and 2017
(dollars in thousands)

		2018	2017
Cash flow from operating activities:			
Net income attributable to Canandaigua National Corporation	$	35,912	22,025
Adjustments to reconcile net income to			
net cash provided by operating activities:			
Depreciation, amortization and accretion		5,602	6,164
Provision for loan losses		7,775	6,400
Loss on sale of fixed and other assets and other real estate, net		6	19
Writedown of other real estate		118	152
Deferred income tax expense		552	4,128
Income from other investments, net		(123)	(198)
Loss on security transactions, net		4	22
Unrealized loss on equity securities		594	-
Gain on sale of mortgage loans, net		(2,164)	(2,718)
Originations of loans held for sale		(140,842)	(164,564)
Proceeds from sale of loans held for sale		145,500	166,603
Gain on sale of other investments, net		(4,531)	-
Change in other assets		(5,126)	(2,522)
Change in other liabilities		7,362	(314)
Net cash provided by operating activities		50,639	35,197
Cash flow from investing activities:			
Debt Securities available-for-sale:			
Proceeds from maturities and calls		888	35,439
Purchases		(44,480)	(139,163)
Debt Securities held to maturity:			
Proceeds from maturities and calls		30,905	39,181
Purchases		(1,535)	(907)
Equity Securities:			
Purchases		(4,000)	-
Loan originations in excess of principal collections, net		(176,698)	(203,844)
Purchase of premises and equipment, net		(1,948)	(2,329)
Purchases of FHLB and FRB stock		(3,649)	(3,388)
Proceeds from sale of other real estate		255	803
Proceeds from sale of other investments		3,585	-
Purchase of noncontrolling interests		-	(2)
Net cash used in investing activities		(196,677)	(274,210)
Cash flow from financing activities:			
Net (decrease) increase in demand, savings and money market deposits		(22,364)	102,050
Net increase (decrease) in time deposits		124,455	(6,781)
Overnight and short-term borrowings, net		16,700	38,400
Proceeds from long-term borrowings		50,000	200,000
Principal repayments of long-term borrowings		(93)	(160,140)
Proceeds from sale of treasury stock		354	449
Payments to acquire treasury stock		(2,825)	(1,939)
Proceeds from issuance of treasury stock under stock option plan		927	326
Dividends paid		(9,011)	(8,067)
Net cash provided by financing activities		158,143	164,298
Net increase (decrease) in cash and cash equivalents		12,105	(74,715)
Cash and cash equivalents - beginning of period		57,237	131,952
Cash and cash equivalents - end of period	$	69,324	57,237
Supplemental disclosure of cash flow information:			
Interest paid	$	14,323	9,811
Income taxes paid		8,711	13,482
Supplemental schedule of noncash investing activities			
Real estate acquired in settlement of loans	$	1,320	359
Other proceeds from sale of other investments (Promissory Note and equity securities)		1,035	-

See accompanying notes to consolidated financial statements.

(1) Summary of Significant Accounting Policies

Business

Canandaigua National Corporation (the Company) and subsidiaries provides a full range of financial services, including banking, trust, investment, and insurance services to individuals, corporations, and municipalities. The Company is subject to competition from other financial services and commercial companies in various regulated and unregulated industries. The Company and its subsidiaries are subject to the regulations of certain federal and state agencies and undergo regular examinations by those regulatory authorities.

Basis of Presentation

The Consolidated Financial Statements include the accounts of the Company and its wholly- and majority-owned subsidiaries. Its principal operations comprise the activities of The Canandaigua National Bank and Trust Company (the Bank), CNB Mortgage Company (CNBM), Canandaigua National Trust Company of Florida (CNTF), and WBI OBS Financial, LLC (WBI). All significant intercompany accounts and transactions have been eliminated in consolidation. The Company accounts for investments in less-than-majority-owned entities under the equity method. The Consolidated Financial Statements have been prepared in conformity with U.S. Generally Accepted Accounting Principles and conform to predominant practices within the financial services industry.

In preparing the Consolidated Financial Statements, management made 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, as well as the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates, particularly with respect to the allowance for loan losses, income taxes, and securities with other than temporary impairment.

Amounts in prior years' Consolidated Financial Statements are reclassified whenever necessary to conform to the current year's presentation.

The Company has evaluated subsequent events through March 4, 2019, the date the financial statements were made available to be issued.

Cash Equivalents

For the purpose of reporting cash flows, cash and cash equivalents include cash, interest-bearing deposits with other financial institutions, and federal funds sold.

Securities

The Company classifies its securities as debt securities available for sale, debt securities held to maturity, or equity securities. The Company does not hold any securities considered to be trading. Debt securities held to maturity are those that the Company has the ability and intent to hold until maturity. Debt securities held to maturity are recorded at amortized cost.

Debt securities available for sale are recorded at fair value. Except for unrealized losses charged to earnings for other-than-temporary-impairment deemed to be credit-related or based on intent to sell, unrealized holding gains and losses, net of the related tax effect, are excluded from earnings and are included in accumulated other comprehensive loss in stockholders' equity until realized.

As of January 1, 2018, equity securities with readily determinable fair values are measured at fair value with changes in fair value recognized in other non-interest income within the consolidated statements of income. Prior to that date, changes in fair value were excluded from earnings and were included in accumulated other comprehensive loss in stockholders' equity until realized.

Management evaluates securities for other-than-temporary impairment at least on a quarterly basis, and more frequently when economic or market conditions warrant such evaluation. Consideration is given to: (1) the length of time and the extent to which the fair value has been less than cost; (2) the financial condition and near-term prospects of the issuer; and (3) the intent and ability of the Company to retain its investment in the issuer for a period of time sufficient to allow for any anticipated recovery in fair value. A decline in fair value of any security below cost that is deemed other than temporary ("OTTI") and related to the credit-worthiness of the issuer is charged to earnings, resulting in the establishment of a new cost basis for the security. Management generally evaluates the credit-worthiness of the issuer based on their ability to produce sufficient cash flows to service the contractual debt obligation.

Interest income and dividends are recognized when earned. Premiums and discounts are amortized or accreted over the life of the related security as an adjustment to yield using the interest method. Realized gains and losses are included in earnings and are determined using the specific identification method.

Loans

Loans, other than loans designated as held for sale, are stated at the principal amount outstanding net of deferred origination fees and costs. Interest and deferred fees and costs on loans are credited to income based on the effective interest method. Loans held for sale are carried at the lower of cost or fair value.

The accrual of interest on commercial and real estate loans is generally discontinued, and previously accrued interest is reversed, when the loans become 90 days delinquent or when, in management's judgment, the collection of principal and interest is uncertain. Loans are returned to accrual status when the doubt no longer exists about the loan's collectability and the borrower has demonstrated a sustained period of timely payment history. Specifically, the borrower will have resumed paying the full amount of scheduled interest and principal payments; all principal and interest amounts contractually due (including arrearages) are reasonably assured of repayment within a reasonable period (6 months); and there is a sustained period of repayment performance (generally a minimum of six months) by the borrower, in accordance with the contractual terms involving payments of cash or cash equivalents. Interest on consumer loans is accrued until the loan becomes 120 days past due at which time principal and interest are generally charged off.

Management, considering current information and events regarding the borrowers' ability to repay their obligations, considers a loan to be impaired when it is probable that the Company will be unable to collect all amounts due according to the contractual terms of the loan agreement. When a loan is considered to be impaired, and sufficient information exists to make a reasonable estimate of the inherent loss, the amount of the impairment is measured based on the present value of expected future cash flows discounted at the loan's effective interest rate, or as a practical expedient, at the loan's observable fair value or the fair value of underlying collateral if the loan is collateral-dependent. In the absence of sufficient, current data to make a detailed assessment of collateral values or cash flows, management measures impairment on a pool basis using historical loss factors equivalent to similarly impaired loans. Impairment reserves are included in the allowance for loan losses through a charge to the provision for loan losses. Cash receipts on impaired loans are generally applied to reduce the principal balance outstanding. In considering loans for evaluation of specific impairment, management generally excludes smaller balance homogeneous loans (loans or relationship size $0.1 million or less) within the small business, residential mortgage, home equity, and all consumer portfolio. These loans are collectively evaluated for risk of loss on a pool basis. This limitation does not preclude the Company from assessing impairment on a loan-by-loan basis if necessary.

Allowance for Loan Losses

The allowance for loan losses is a valuation reserve for probable and inherent incurred losses in the loan portfolio. Credit losses arise primarily from the loan portfolio, but may also be derived from other credit-related sources, when drawn upon, such as commitments, guarantees, and standby letters of credit. Additions are made to the allowance through periodic provisions, which are charged to expense. All losses of principal are charged to the allowance when incurred or when a determination is made that a loss is expected. Subsequent recoveries, if any, are credited to the allowance.

The Company has established a process to assess the adequacy of the allowance for loan losses and to identify the risks in the loan portfolio. This process consists of the identification of specific reserves for impaired commercial loans and material residential mortgages, and the calculation of general reserves, which is a formula-driven allocation.

The calculation of the general reserve involves several steps. A historical loss factor is applied to each loan by loan type and loan classification. The historical loss factors are calculated using a loan-by-loan, trailing eight-quarter net loss migration analysis for commercial loans. For all other loans, a portfolio-wide, trailing eight-quarter net loss migration analysis is used. Adjustments are then made to the historical loss factors based on current-period quantitative objective elements (delinquency, non-performing assets, classified/criticized loan trends, charge-offs, concentrations of credit, recoveries, etc.) and qualitative elements (economic conditions, portfolio growth rate, portfolio management, credit policy, and others). This methodology is applied to the commercial, residential mortgage, and consumer portfolios, and their related off-balance sheet exposures. Any allowance for off-balance sheet exposures is recorded in accrued interest payable and other liabilities.

While management uses available information to recognize losses on loans, future additions to the allowance may be necessary. In addition, various regulatory agencies, as an integral part of their examination process, periodically review the Company's allowance for loan losses. Such agencies 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.

Troubled Debt Restructurings

In the process of resolving nonperforming loans, we may choose to restructure the contractual terms of certain loans and attempt to work out alternative payment schedules with the borrower in order to avoid foreclosure of collateral. Any loans that are modified are evaluated to determine if they are "troubled debt restructurings" (TDR) and if so, are evaluated for impairment. A TDR is defined as a loan restructure which, for legal or economic reasons related to a borrower's financial difficulties, the creditor grants one or more concessions to the borrower that it would not otherwise consider. Terms of loan agreements may be modified to fit the ability of the borrower to repay in respect of its current financial status; and restructuring of loans may include the transfer of assets from the borrower to satisfy debt, a modification of loan terms, or a combination of the two. If a satisfactory restructure and payment arrangement cannot be reached, the loan may be referred to legal counsel for foreclosure.

Premises and Equipment

Land is carried at cost. Land improvements, buildings, leasehold improvements and equipment are carried at cost, less accumulated depreciation and amortization. Depreciation is computed using straight-line and accelerated methods over the estimated useful lives of the assets, three to twenty-five years. Amortization of leasehold improvements is provided over the lesser of the term of the lease, including renewal options, when applicable, or the estimated useful lives of the assets.

Other Real Estate

Other real estate acquired through foreclosure or deed in lieu of foreclosure (other real estate) is included in other assets, upon receipt of title, and is recorded at the lower of the unpaid loan balance on the property at the date of transfer, or fair value, less estimated costs to sell. Adjustments made to the value at transfer are charged to the allowance for loan losses. After transfer, the property is carried at the lower of cost or fair value less estimated costs to sell. Adjustments to the carrying values of such properties that result from subsequent declines in value are charged to operations in the period in which the declines occur. Operating earnings and costs associated with the properties are charged to other non-interest income and operating expense as incurred. Gains or losses on the sale of other real estate are included in results of operations when the sale occurs.

Loan Servicing Assets

The Company services first-lien, residential loans for the Federal Home Loan Mortgage Company (FHLMC), also known as Freddie Mac, and certain commercial loans as lead participant. The associated servicing rights (assets) entitle the Company to a future stream of cash flows based on the outstanding principal balance of the loans and contractual servicing fees. Failure to service the loans in accordance with contractual requirements may lead to a termination of the servicing rights and the loss of future servicing fees.

The Company services all loans for FHLMC on a non-recourse basis; therefore, its credit risk is limited to temporary advances of funds to FHLMC, while FHLMC retains all credit risk associated with the loans. Commercial loans are serviced on a non-recourse basis, whereby the Company is subject to credit losses only to the extent of the proportionate share of the loan's principal balance owned. The Company's contract to sell loans to FHLMC and to the Federal Housing Administration (FHA) via third-parties contain certain representations and warranties that if not met by the Company would require the repurchase of such loans. The Company has not historically been subject to a material volume of repurchases nor is it as of the current year end.

Loan servicing assets are amortized to loan servicing income in the statement of income. In computing amortization expense, the Company uses historical prepayment rates for similar loan pools and applies this amortization rate to each pool. If prepayments occur at a rate different than the applied rate, the Company adjusts the specific pool's amortization in the period in which the change occurs.

For purposes of evaluating and measuring impairment of loan servicing rights, the Company stratifies these assets based on predominant risk characteristics of the underlying loans that are expected to have the most impact on projected prepayments, cost of servicing, and other factors affecting future cash flows associated with the servicing rights, such as loan type, rate, and term. The amount of impairment recognized is the amount by which the carrying value of the loan servicing rights for a stratum exceeds fair value. Impairment is recognized through the income statement.

Goodwill and Intangible Assets

Goodwill has an indefinite useful life and is not amortized, but is tested for impairment. Goodwill impairment tests are performed on an annual basis or when events or circumstances dictate. A qualitative assessment of goodwill is first performed, factoring company-specific and economic characteristics that might impact its carrying value. If the assessment indicates goodwill might be impaired, a quantitative test is performed in which the fair value of the reporting unit with goodwill is compared to the carrying amount of that reporting unit in order to determine if impairment is indicated. If so, the implied fair value of the reporting unit's goodwill is compared to its carrying amount and an impairment loss is measured by the excess of the carrying value over fair value. Fair value of goodwill is estimated using a weighted average of market-based analysis and discounted cash-flow income analysis of the underlying reporting unit.

Intangible assets that have finite useful lives, such as customer relationships, technology, and trade name intangibles, are amortized over their useful lives. Customer relationship intangibles are amortized annually using an accelerated method for up to 15 years. Technology is generally amortized over a five year period also using an accelerated method. Trade name intangible has been amortized on a straight-line basis over three years. Amortization of these assets is reported in other operating expenses. The amortization period is monitored to determine if circumstances require the period to be revised. The Company also periodically reviews its intangible assets for changes in circumstances that may indicate that the carrying amount of the assets are impaired. The Company tests its intangible assets for impairment if conditions indicate that an impairment loss has more likely than not been incurred by evaluating the recoverability of the assets' carrying value using estimates of undiscounted future cash flows over the remaining assets' lives. Any impairment loss is measured by the excess of carrying value over fair value and is recorded in the measured period as additional amortization expense.

Stock-Based Compensation

Stock-based compensation expense is recognized in the consolidated statements of income over the awards' vesting period based on the fair value of the award at the grant date.

The Company accounts for the liability associated with its stock appreciation rights plan at fair value which is re-measured quarterly. Fair value is measured using the Black-Scholes-Merton option pricing model. The associated compensation expense or credit reported in the statement of income represents the change in the remeasured liability.

Income Taxes

The Company and its wholly-owned subsidiaries file income tax returns in the U.S. Federal jurisdiction and in the states of New York, Florida and Ohio. Deferred income tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply 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 the period that includes the enactment date.

The Company recognizes interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense.

Derivative Financial Instruments

Derivatives are recognized as either assets or liabilities in the consolidated balance sheets and are measured at fair value. If certain conditions are met, a derivative may be specifically designated as: (a) a hedge of the exposure to changes in the fair value of a recognized asset or liability or an unrecognized firm commitment; (b) a hedge of the exposure to variable cash flows of a forecasted transaction; or (c) a hedge of the foreign currency exposure of a net investment in a foreign operation, an unrecognized firm commitment, an available for sale security, or a foreign currency denominated forecasted transaction. The accounting for changes in the fair value of a derivative depends on the intended use of the derivative and the resulting designation. At inception of the hedge, management establishes the application of hedge accounting and the method it will use for assessing the effectiveness of the hedging derivative and the measurement approach for determining the ineffective aspect of the hedge. These are consistent with management's approach to managing risk.

The Company's derivative financial instruments include: (1) commitments to originate fixed-rate residential real estate loans to be held for sale; (2) commitments to sell fixed-rate residential loans; and (3) interest rate swap agreements.

Commitments to originate and commitments to sell fixed-rate residential real estate loans are recorded in the consolidated balance sheet at estimated fair value. Neither of these derivative instruments are considered hedges; therefore, periodic changes in the fair value of these instruments are recognized in mortgage banking income in the period in which the change occurs. However, due to the minimal volume and short-term nature of these instruments, the net impact of a change in fair value from the instruments' initially recognized fair value is generally immaterial.

The Company utilizes interest rate swap agreements as part of its management of interest rate risk to modify the repricing characteristics of its floating-rate junior subordinated debentures. For swap agreements, amounts receivable or payable are recognized as accrued under the terms of the agreement, and the net differential is recorded as an adjustment to interest expense of the related debentures. Interest rate swap agreements are designated as cash flow hedges. Therefore, the effective portion of the swaps' unrealized gain or loss was initially recorded as a component of other comprehensive income, and subsequent effective portions are recognized in interest expense. The ineffective portion of the unrealized gain or loss, if any, is reported in other operating income.

The Company also utilizes interest rate swap agreements for certain variable rate commercial loans whereby the Company and borrowers enter into interest rate swap agreements that result in borrowers paying a fixed rate to the Company and the Company paying a variable rate to borrowers. The transaction allows the borrower to effectively convert a variable rate loan to a fixed rate. The Company then enters into separate interest rate swap agreements having exact opposite matching terms with another financial institution. The Company does not designate either interest rate swap as hedging instruments. Because the terms of the swaps with the borrower and the other financial institution offset each other, with the only difference being counterparty credit risk, changes in the fair value of the underlying derivative contracts are not materially different and do not significantly impact the Company's results of operation.

Accumulated Other Comprehensive Income (Loss)

The Company's comprehensive income consists of net income, changes in the net unrealized holding gains and losses of securities available for sale, and changes in the net unrealized gain or loss on the effective portion of cash flow hedges. Accumulated other comprehensive loss on the consolidated statements of stockholders' equity is presented net of taxes.

Treasury Stock

Treasury stock is carried on the consolidated balance sheets at cost as a reduction of stockholders' equity. Shares are released from treasury at original cost on a first-in, first-out basis, with any gain on the sale reflected as an adjustment to additional paid-in capital. Losses are reflected as an adjustment to additional paid-in capital to the extent of gains previously recognized, otherwise as an adjustment to retained earnings.

Trust and Investment Services Income

Assets held in fiduciary or agency capacity for clients are not included in the accompanying consolidated balance sheets, since such assets are not assets of the Company. Fees are calculated based generally upon the market value of the underlying assets. Fee income is recognized when earned, and is not subject to return-performance contingencies.

Earnings Per Share

Basic earnings per share is calculated by dividing net income available to common shareholders by the weighted average number of shares outstanding during the year. Diluted earnings per share includes the maximum dilutive effect of stock issuable upon exercise of stock options.

New Accounting Standards

The following Accounting Standards Updates (ASU) were adopted during 2018 with no material impact to the Company's financial condition or results of operations.

ASU 2016-01 Recognition and Measurement of Financial Assets and Financial Liabilities significantly changed the income statement impact of equity investments. The standard became effective for the first quarter of 2018, and requires that equity investments be measured at fair value, with changes in fair value measured in net income. The company elected to early adopt this standard as of January 1, 2018. The effect of the adoption was a decrease to retained earnings of $81 thousand with a corresponding decrease to accumulated other comprehensive loss as of January 1, 2018. The change (decrease) in fair value occurring during 2018 of $594 thousand was measured in net income through inclusion in other non-interest income within the consolidated statements of income. For periods prior to January 1, 2018, equity securities were classified as available-for-sale and stated at fair value with unrealized gains and losses reported as a separate component of accumulated other comprehensive income, net of tax. Refer to Note 18 "Fair Values of Financial Instruments" for additional information regarding adoption.

ASU 2018-02 Income Statement-Reporting Comprehensive Income (Topic 220) – Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income permits a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act (the "TCJ Act"). Consequently, the ASU eliminates the stranded tax effects resulting from the TCJ Act. This ASU was issued in response to concern expressed by stakeholders about the guidance in current GAAP that requires deferred tax liabilities and assets to be adjusted for the effect of a change in tax laws or rates with the effect included in income from continuing operations in the reporting period that includes the enactment date. That guidance is applicable even in situations in which the related income tax effects of items in accumulated other comprehensive income were originally recorded in other comprehensive income (rather than in income from continuing operations). The Company reclassified approximately $826 thousand from accumulated other comprehensive loss to retained earnings when ASU 2018-02 was adopted.

The Financial Accounting Standards Board issues, from time to time, updates containing technical amendments. These updates are generally effective immediately upon their issuance, but have no practical impact on our financial condition or results of operations. Because these are technical in nature, and have no material impact, a summary is not included herein.

(2) Intangibles Assets

Acquisition-related identifiable intangible assets were comprised of the following at December 31, (in thousands):

	2018	2017
Gross carrying amounts	12,255	12,255
Less accumulated amortization	(11,406)	(10,868)
Intangible asset – net	$ 849	1,387

Amortization expense amounted to $0.5 million and $0.6 million for the years ended December 31, 2018 and 2017, respectively. Amortization expense is projected over the next five years as follows: 2019: $0.4 million; 2020: $0.2 million; 2021: $0.1 million, 2022: $0.1 million, and 2023: $0.03 million.

(3) Securities

Amortized cost, gross unrealized gains (gross unrealized losses), and fair value of debt securities available-for-sale, equity securities, and debt securities held-to-maturity at December 31, 2018 are summarized as follows:

		2018			
			Gross Unrealized		
		Amortized Cost	Gains	Losses	Fair Value
Debt Securities Available for Sale:					
U.S. Treasury	$	2,500	13	-	2,513
U.S. government sponsored enterprise obligations		207,614	6	(3,168)	204,452
State and municipal obligations		138,180	70	(2,016)	136,234
Total Debt Securities Available for Sale	$	348,294	89	(5,184)	343,199
Debt Securities Held to Maturity:					
State and municipal obligations	$	54,958	11	(207)	54,762
Corporate obligations		319	146	-	465
Total Debt Securities Held to Maturity	$	55,277	157	(207)	55,227
Equity Securities:					
Total Equity Securities	$	9,420	7	(710)	8,717

The amortized cost and fair value of debt securities by years to maturity as of December 31, 2018, is as follows (in thousands). Maturities of amortizing securities are classified in accordance with their contractual repayment schedules. Expected maturities will differ from contractual maturities since issuers may have the right to call or prepay obligations without penalties.

		Available for Sale		Held to Maturity	
		Amortized Cost	Fair Value	Amortized Cost	Fair Value
Years					
Under 1	$	6,241	6,185	31,854	31,804
1 to 5		296,198	291,971	23,104	22,958
5 to 10		45,271	44,466	-	-
10 and over		584	577	319	465
Total	$	348,294	343,199	55,277	55,227

Amortized cost, gross unrealized gains (gross unrealized losses), and fair value of debt securities available-for-sale, equity securities, and debt securities held-to-maturity at December 31, 2017 are summarized as follows:

		2017			
			Gross Unrealized		
		Amortized Cost	Gains	Losses	Fair Value
Debt Securities Available for Sale:					
U.S. Treasury	$	504	-	(1)	503
U.S. government sponsored enterprise obligations		194,158	8	(2,938)	191,228
State and municipal obligations		110,867	8	(1,685)	109,190
Equity Securities		4,700	2	(112)	4,590
Total Debt Securities Available for Sale	$	310,229	18	(4,736)	305,511
Debt Securities Held to Maturity:					
State and municipal obligations	$	84,753	21	(282)	84,492
Corporate obligations		419	220	-	639
Total Debt Securities Held to Maturity	$	85,172	241	(282)	85,131

At December 31, 2018, and 2017, securities at amortized cost of $275.3 million and $238.2 million, respectively, were pledged to secure municipal deposits and for other purposes required or permitted by law.

No debt securities available-for-sale or debt securities held-to-maturity or were sold in 2018 or 2017.

Interest on securities segregated between taxable interest and tax-exempt interest for the years ended December 31, 2018 and 2017, follows (in thousands):

		2018	2017
Taxable	$	4,794	3,332
Tax-exempt		2,636	2,516
Total	$	7,430	5,848

The following table presents the fair value of securities with gross unrealized losses at December 31, 2018, aggregated by category and length of time that individual securities have been in a continuous loss position (in thousands).

		Less than 12 months		Over 12 months		Total	
Debt Securities Available for Sale		Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Treasury	$	203	-	100	-	303	
U.S. government sponsored enterprise obligations		12,036	(22)	182,439	(3,146)	194,475	(3,168)
State and municipal obligations		17,707	(74)	104,083	(1,942)	121,790	(2,016)
Total temporarily impaired debt securities	$	29,946	(96)	286,622	(5,088)	316,568	(5,184)
Debt Securities Held to Maturity							
State and municipal obligations	$	2,182	(5)	49,131	(202)	51,313	(207)
Total temporarily impaired debt securities	$	2,182	(5)	49,131	(202)	51,313	(207)

Substantially all of the unrealized losses on the Company's securities were caused by market interest rate changes from those in effect when the specific securities were purchased by the Company. The contractual terms of these securities do not permit the issuer to settle the securities at a price less than par value. All securities rated by an independent rating agency carry an investment grade rating. Because the Company does not intend to sell securities and it believes it is not likely to be required to sell the securities before recovery of their amortized cost basis, which may be, and is likely to be, maturity, the Company does not consider these securities to be other-than-temporarily impaired at December 31, 2018.

The following table presents the fair value of securities with gross unrealized losses at December 31, 2017, aggregated by category and length of time that individual securities have been in a continuous loss position (in thousands).

		Less than 12 months		Over 12 months		Total	
Debt Securities Available for Sale		Fair Value	Unrealized Losses	Fair Value	Unrealized Losses	Fair Value	Unrealized Losses
U.S. Treasury	$	503	1	-	-	503	1
U.S. government sponsored enterprise obligations		69,202	591	113,445	2,347	182,647	2,938
State and municipal obligations		45,228	668	60,324	1,017	105,552	1,685
Equity securities		994	6	2,994	106	3,988	112
Total temporarily impaired debt securities	$	115,927	1,266	176,763	3,470	292,690	4,736
Debt Securities Held to Maturity							
State and municipal obligations	$	5,767	6	69,836	276	75,603	282
Total temporarily impaired debt securities	$	5,767	6	69,836	276	75,603	282

The total number of security positions in the investment portfolio in an unrealized loss position at December 31, 2018 was 569 compared to 608 at December 31, 2017. At December 31, 2018, the Company had positions in 499 investment securities with a fair value of $339.7 million and a total unrealized loss of $5.5 million that have been in a continuous unrealized loss position for more than 12 months. At December 31, 2018, there were a total of 70 security positions in the Company’s investment portfolio with a fair value of $34.4 million and a total unrealized loss of $0.6 million that had been in a continuous unrealized loss position for less than 12 months. At December 31, 2017, the Company had positions in 427 investment securities with a fair value of $246.6 million and a total unrealized loss of $3.7 million that have been in a continuous unrealized loss position for more than 12 months. At December 31, 2017, there were a total of 181 security positions in the Company’s investment portfolio with a fair value of $121.7 million and a total unrealized loss of $1.3 million that had been in a continuous unrealized loss position for less than 12 months.

The aggregate cost of the Company's cost-method investments totaled $20.3 million and $16.8 million at December 31, 2018 and 2017 respectively, of which $17.1 million and $13.4 million at each year end were in Federal Home Loan Bank stock and Federal Reserve Bank stock, as required by law.

(4) Loans and Allowance for Loan Losses

Loans

The Company's market area is generally Ontario County and Monroe County of New York State. Substantially all loans are made in this market area. Accordingly, the ultimate collectability of a significant portion of the Company's loan portfolio is susceptible to changes in the economic conditions in this area. The Company's concentrations of credit risk are as disclosed in the following table of loan classifications. The concentrations of credit risk in related loan commitments and letters of credit parallel the loan classifications reflected. Other than general economic risks, management is not aware of any material concentrations of credit risk to any industry or individual borrower.

The major classifications of loans at December 31, 2018 and 2017, are as follows (in thousands), along with a description of their underwriting and risk characteristics:

		2018	2017
Commercial and industrial	$	281,489	253,406
Mortgages:			
Commercial		770,476	730,394
Residential - first lien		549,628	495,675
Residential - junior lien		140,630	134,319
Consumer:			
Automobile - indirect		526,990	493,758
Other		37,011	30,681
Loans held for sale, at lower of cost or market		3,151	5,645
Total loans		2,309,375	2,143,878
Plus - Net deferred loan costs		18,868	16,728
Less - Allowance for loan losses		(21,643)	(20,961)
Loans - net	$	2,306,600	2,139,645

Commercial and Industrial Loans: These loans generally include term loans and lines of credit. Such loans are made available to businesses for working capital (including inventory and receivables), business expansion (including acquisition of real estate, expansion and improvements) and equipment purchases. As a general practice, a collateral lien is placed on equipment or other assets owned by the borrower. These loans carry a higher risk than commercial real estate loans by the nature of the underlying collateral, which can be business assets such as equipment and accounts receivable. To reduce the risk, management also attempts to secure secondary collateral, such as real estate, and obtain personal guarantees of the borrowers. To further reduce risk and enhance liquidity, these loans generally carry variable rates of interest, repricing in three- to five-year periods, and have a maturity of five years or less. Lines of credit generally have terms of one year or less and carry floating rates of interest (e.g., prime plus a margin).

Commercial Mortgages: Commercial real estate loans are made to finance the purchases of real property which generally consists of real estate with completed structures. These commercial real estate loans are secured by first liens on the real estate, which may include apartments, commercial structures housing businesses, healthcare facilities, and other non-owner occupied facilities. These loans are considered by the Company to be less risky than commercial and industrial loans, since they are secured by real estate and buildings. The loans typically have adjustable interest rates, repricing in three- to five-year periods, and require principal payments over a 10- to 25-year period. Many of these loans include call provisions within 10 to 15 years of their origination. The Company's underwriting analysis includes credit verification, independent appraisals, a review of the borrower's financial condition, and the underlying cash flows. These loans are typically originated in amounts of no more than 80% of the appraised value of the property serving as collateral.

Residential First-Lien Mortgages: The Company originates adjustable-rate and fixed-rate, one-to-four-family residential real estate loans for the construction, purchase or refinancing of a mortgage. These loans are collateralized by owner- and non-owner-occupied properties located in the Company's market area. They are amortized over five to 30 years. Substantially all residential loans secured by first mortgage liens are originated by CNB Mortgage and sold to either the Bank or third-party investors. Generally, fixed-rate mortgage loans with a maturity or call date of ten years or less and a rate of 3.5% or more are retained in the Company's portfolio. For longer term, fixed-rate residential mortgages without escrow, the Company generally retains the servicing, but sells the right to receive principal and interest to Federal Home Loan Mortgage Company, also known as Freddie Mac. All loans not retained in the portfolio or sold to Freddie Mac are sold to unrelated third parties with servicing released. This practice allows the Company to manage interest rate risk, liquidity risk, and credit risk. From time to time, the Company may also purchase residential mortgage loans which are originated and serviced by third parties. In an effort to manage risk of loss and strengthen secondary market liquidity opportunities, management typically uses secondary market underwriting, appraisal, and servicing guidelines. Loans on one-to-four-family residential real estate are mostly originated in amounts of no more than 85% of appraised value or have private mortgage insurance. Mortgage title insurance and hazard insurance are normally required. Construction loans have a unique risk, because they are secured by an incomplete dwelling. This risk is reduced through periodic site inspections, including at each loan draw period.

Residential Junior-Lien Mortgages: The Company originates home equity lines of credit and second mortgage loans (loans secured by a second (junior) lien position on one-to-four-family residential real estate). These loans carry a higher risk than first mortgage residential loans as they are in a second position relating to collateral. Risk is reduced through underwriting criteria, which include credit verification, appraisals, a review of the borrower's financial condition, and personal cash flows. A security interest, with title insurance when necessary, is taken in the underlying real estate.

Consumer Automobile- Indirect Loans: The Company funds indirect automobile loans - loans processed by automobile dealers on behalf of the Bank. These loans carry a fixed rate of interest with principal repayment terms typically ranging from one to seven years, based upon the nature of the automobile, the size of the loan, and the credit score of the borrower. Although secured by a vehicle these loans carry a higher risk of loss than real-estate secured loans, particularly in the early years of the loan, because automobiles are depreciating assets whose value declines over time, and at a more rapid rate than the related loan’s principal balance.

Other Consumer Loans: The Company funds a variety of other consumer loans, including automobile loans, recreational vehicle loans, boat loans, aircraft loans, home improvement loans, and personal loans (collateralized and uncollateralized). Most of these loans carry a fixed rate of interest with principal repayment terms typically ranging from one to ten years, based upon the nature of the collateral and the size of the loan. The majority of consumer loans are underwritten on a secured basis using the underlying collateral being financed or a customer's deposit account. A small amount of loans are unsecured, which carry a higher risk of loss.

Loans Held for Sale: These are the Residential First-Lien Mortgages, discussed above, which are sold to Freddie Mac and other third parties. These loans are carried at their lower of cost or fair value, calculated on a loan-by-loan basis.

Commercial loan participations serviced for others amounted to $80.4 million and $74.6 million at December 31, 2018 and 2017, respectively. Residential mortgage loans serviced for Freddie Mac, amounted to $543.5 million and $575.9 million at December 31, 2018 and 2017, respectively. None of these loans are included in the Consolidated Financial Statements or the tables within this Note.

Certain executive officers, directors and their business interests are customers of the Company. Transactions with these parties are based on substantially the same terms as similar transactions with unrelated third parties and do not carry more than normal credit risk. Borrowings by these related parties amounted to $8.4 million and $9.1 million at December 31, 2018 and 2017, respectively. During 2018, new borrowings amounted to $0.1 million (including borrowings of executive officers and directors that were outstanding at the time of their election), and repayments and other reductions were $0.8 million.

Allowance for Loan Losses

The following tables present an analysis of the allowance for loan losses by loan type, including a summary of the loan types individually and collectively evaluated for impairment as of December 31, 2018 and, 2017, respectively (in thousands). Notwithstanding the estimated allocations set forth in any table, the entirety of the allowance is available to absorb losses in any portfolio. Loan balances exclude $18.9 million and $16.7 million of net deferred loan costs as of December 31, 2018 and December 31, 2017, respectively.

		2018								
		Commercial and industrial	Commercial mortgage	Residential Mortgage - first lien	Residential mortgage - junior lien	Consumer - indirect	Consumer - other	Loans held for sale	Unallocated	Total
Beginning Balance	$	6,458	1,509	1,265	290	9,482	1,957	-	-	20,961
Charge-offs		(5,141)	(125)	(14)	(28)	(2,478)	(1,013)	-	-	(8,799)
Recoveries		243	-	21	17	1,068	357	-	-	1,706
Provision		4,759	1,258	(57)	33	1,015	767	-	-	7,775
Ending Balance	$	6,319	2,642	1,215	312	9,087	2,068	-	-	21,643
of which:										
Amount of allowance for loans individually evaluated for impairment	$	2,346	-	15	-	-	-	-	-	2,361
Amount of allowance for loans collectively evaluated for impairment	$	3,973	2,642	1,200	312	9,087	2,068	-	-	19,282
Balance of loans individually evaluated for impairment	$	3,569	2,344	591	400	-	-	-	-	6,904
Balance of loans collectively evaluated for impairment	$	277,920	768,132	549,037	140,230	526,990	37,011	3,151	-	2,302,471

2017		Commercial and industrial	Commercial mortgage	Residential Mortgage - first lien	Residential Mortgage - junior lien	Consumer - indirect	Consumer - other	Loans held for sale	Unallocated	Total
Beginning Balance	$	6,325	1,527	1,811	321	8,842	1,935	-	-	20,761
Charge-offs		(3,848)	(874)	(108)	(109)	(2,191)	(979)	-	-	(8,109)
Recoveries		154	-	148	45	1,244	318	-	-	1,909
Provision		3,827	856	(586)	33	1,587	683	-	-	6,400
Ending Balance	$	6,458	1,509	1,265	290	9,482	1,957	-	-	20,961
of which:										
Amount of allowance for loans individually evaluated for impairment	$	4,043	-	23	-	-	-	-	-	4,066
Amount of allowance for loans collectively evaluated for impairment	$	2,415	1,509	1,242	290	9,482	1,957	-	-	16,895
Balance of loans individually evaluated for impairment	$	8,194	2,400	114	-	-	-	-	-	10,708
Balance of loans collectively evaluated for impairment	$	245,212	727,994	495,561	134,319	493,758	30,681	5,645	-	2,133,170

In monitoring the credit quality of the portfolio, management applies a credit quality indicator to substantially all commercial loan relationships over $500,000. These quality indicators range from one through eight in increasing risk of loss. These ratings are used as inputs to the calculation of the allowance for loan losses. Loans rated 1 through 4 are generally allocated a lesser percentage allocation in the allowance for loan losses than loans rated from 5 through 8. Residential Mortgage Loans and Consumer Loans are generally rated 9, unless they are used to partially collateralize commercial loans, in which case they carry the rating of the respective commercial loan relationship, or if management wishes to recognize a well-defined weakness or loss potential to more accurately reflect credit risk. Unrated loans, including performing commercial loan relationships less than $500,000, are allocated a percentage of the allowance for loan losses on a pooled basis.

Loans rated 1 include borrowers whose financial condition, liquidity, capitalization, earnings, cash flow, management and capacity to repay are strong. If deficient in any of these areas, a borrower may still be considered for a 1 rating, if fully secured by cash, or properly margined, listed stock, investment grade corporate bonds or U.S. Government Securities, (125% collateral value to loan commitment).

A loan rated 2 would include borrowers who are somewhat more of a credit risk than a 1 rated borrower and therefore require more frequent monitoring. Those borrowers would have the following qualities: cash flow has been and is expected to be adequate to meet debt service requirements; financial statement is current, of good quality and in adequate detail; financial condition of company compares favorably with the industry averages; earnings are generally stable; borrower consistently adheres to repayment schedule for both principal and interest and covenants; management integrity and ability is considered sound; and industry outlook is acceptable.

Loans rated 3 include credits whose performance is generally stable. Also included in this category are credits where the guarantor is sufficiently strong to support operating losses and has demonstrated a willingness to do so. Additionally, loans risk rated 3 may include the following qualities: borrower’s business is tied to more economically sensitive industries; borrower may have violated one or more financial covenants; occasional requirements for waivers, or amendments may occur, however liquidity and capitalization are expected to continue to be acceptable; integrity of management is acceptable but ability remains to be proven; borrower may not compare well to industry standards; relationship requires a high level of monitoring due to its complexity. Also, financial data of affiliates may not be available or difficult to track; borrower may not provide sufficient documentation for confirming all taxable income/losses but consistently adheres to repayment schedules for both principal and interest. Also, borrower may report a high level of contingent liabilities.

Loans rated 4 would include credits which demonstrate any or all of the following criteria: borrower’s or guarantor’s financial performance shows negative trends and yet cash flow remains still adequate to repay debt; loans which continue to pay as agreed but the Bank has not received current financial statements to confirm repayment ability and to enable management to complete a timely annual review; most commercial construction loans; loan has been processed through automated underwriting and does not meet management’s scoring threshold; loans to start-up companies until the borrower’s have achieved stabilized operations (i.e., 1-3 years); and loans recommended for upgrade from problem loan status (5 through 8) would generally pass through this category for 6 months to a year unless there are sufficient reasons to bypass this rating and be upgraded to a 3 or higher.

Loans risk rated 5 are currently protected but are potentially weak. These loans, in management’s judgment, constitute an undue and unwarranted credit risk but not to the point of justifying a classification of substandard. The credit risk may be relatively minor yet constitute an unwarranted risk in light of the circumstances surrounding a specific asset. Loans in this category have potential weaknesses which may, if not checked or corrected, weaken the loan or inadequately protect the Bank's credit position at some future date. This might include loans which the lending officer may be unable to supervise properly because of: lack of expertise, inadequate loan agreement, the poor condition of or lack of control over collateral, failure to obtain proper documentation or any other deviations from prudent lending practices. Economic or market conditions which may, in the future, affect the obligor may warrant special mention of the asset. Loans for which an adverse trend in the borrower's operations or an imbalanced position in the balance sheet which has not reached a point where the liquidation is jeopardized may be included in this classification.

Loans risk rated 6 are considered substandard. A substandard loan is inadequately protected by the sound worth and paying capacity of the obligor or of the collateral pledged, if any. Loans so classified must have a well-defined weakness or weaknesses that jeopardize the liquidation of the debt. They are characterized by the distinct possibility that the Bank will sustain some loss if the deficiencies are not corrected. Loss potential, while existing in the aggregate amount of substandard loans, does not have to exist in individual loans classified substandard. Residential mortgages are not subject to substandard classification unless the following well defined weaknesses have occurred: the ability of the borrower to repay the debt is questionable as evidenced by delinquency of 90 days, and repayment of the debt is dependent on the sale of the underlying real estate. A consumer loan is considered a substandard asset only when it is 90 days past due.

Loans risk rated 7 are categorized as doubtful. These loans have all the weaknesses inherent in one classified substandard with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently existing facts, conditions, and values, highly questionable and improbable. The possibility of loss is extremely high but because of certain important and reasonably specific pending factors which may work to the advantage and strengthening of the loan, its classification as an estimated loss is deferred until its more exact status may be determined. Pending factors include proposed merger, acquisition, or liquidation procedures, capital injection, perfecting liens on additional collateral and refinancing plans. The entire amount of the loan might not be classified as doubtful when collection of a specific portion appears highly probable. Loans are generally not classified doubtful for an extended period of time (i.e., over a year).

Loans classified 8, or loss, are considered uncollectible and of such little value that their continuance as bankable assets is not warranted. This classification does not mean that the asset has absolutely no recovery or salvage value, but rather it is not practical or desirable to defer writing off this basically worthless asset even though partial recovery may be affected in the future. Losses are taken in the period in which they surface as uncollectible.

Loans in category 9 and unrated are evaluated for credit quality after origination principally based upon delinquency status, but may also include credit scores and collateral valuations.

The following tables present the loan portfolio as of December 31, 2018 and 2017 by credit quality indicator (in thousands). Except for loans in the 9 and unrated categories, credit quality indicators are reassessed for each applicable loan at least annually, generally upon the anniversary of the loan’s origination or receipt and analysis of the borrower’s financial statements, when applicable, or in the event that information becomes available that would cause us to reevaluate.

Credit Quality Indicator Analysis as of December 31, 2018

		Commercial and industrial	Commercial mortgage	Residential mortgage - first lien	Residential mortgage - junior lien	Consumer - indirect	Consumer - other	Loans held for sale	Deferred Fees and Costs	Total
1-Superior	$	40,858	-	-	-	-	9,641	-	-	50,499
2-Good		43,621	104,545	1,033	930	-	-	-	-	150,129
3-Satisfactory		25,610	259,155	2,747	2,544	-	-	-	-	290,056
4-Watch		51,210	296,756	25,808	165	-	-	-	-	373,939
5-Special Mention		1,282	6,515	729	-	-	-	-	-	8,526
6-Substandard		8,473	35,498	1,437	572	-	-	-	-	45,980
7-Doubtful		427	-	-	-	-	-	-	-	427
8-Loss		-	-	-	-	-	-	-	-	-
Subtotal	$	171,481	702,469	31,754	4,211	-	9,641	-	-	919,556
9 and not rated		110,008	68,007	517,874	136,419	526,990	27,370	3,151	18,868	1,408,687
Total	$	281,489	770,476	549,628	140,630	526,990	37,011	3,151	18,868	2,328,243

Credit Quality Indicator Analysis as of December 31, 2017

		Commercial and industrial	Commercial mortgage	Residential mortgage - first lien	Residential mortgage - junior lien	Consumer - indirect	Consumer - other	Loans held for sale	Deferred Fees and Costs	Total
1-Superior	$	29,776	-	-	-	-	5,909	-	-	35,685
2-Good		42,906	91,651	1,352	2,265	-	-	-	-	138,174
3-Satisfactory		32,869	270,308	5,739	458	-	-	-	-	309,374
4-Watch		40,008	270,017	22,829	1,303	-	-	-	-	334,157
5-Special Mention		6,557	10,447	-	-	-	-	-	-	17,004
6-Substandard		11,009	9,704	2,079	400	-	-	-	-	23,192
7-Doubtful		825	-	-	-	-	-	-	-	825
8-Loss		-	-	-	-	-	-	-	-	-
Subtotal	$	163,950	652,127	31,999	4,426	-	5,909	-	-	858,411
9 and not rated		89,456	78,267	463,676	129,893	493,758	24,772	5,645	16,728	1,302,195
Total	$	253,406	730,394	495,675	134,319	493,758	30,681	5,645	16,728	2,160,606

The following table presents, as of December 31, 2018 and December 31, 2017, a summary of information regarding nonaccruing loans and other nonperforming (in thousands):

		2018	2017
Accruing loans 90 days or more delinquent	$	623	330
Nonaccruing loans		7,192	12,994
Total nonperforming loans		7,815	13,323
Other real estate owned		1,375	568
(less write-down of other real estate owned)		(55)	(254)
Total nonperforming assets	$	9,135	13,638

The following tables present, as of December 31, 2018 and December 31, 2017, additional details about the loan portfolio in the form of an aging analysis. Amounts exclude deferred fees and costs (in thousands).

2018		30-59 Days Past Due	60-89 Days Past Due	90 Days Or Greater	Total Past Due	Current	Total Loans	> 90 Days and Accruing	Non-Accrual Loans
Commercial and industrial	$	788	127	3,576	4,491	276,998	281,489	7	3,569
Commercial mortgages		1,687	-	2,344	4,031	766,445	770,476	-	2,344
Residential - first lien		6,945	1,071	801	8,817	540,811	549,628	93	708
Residential - junior lien		704	168	734	1,606	139,024	140,630	163	571
Consumer:									
Automobile - Indirect		6,425	732	342	7,499	519,491	526,990	342	-
Other		113	55	18	186	36,825	37,011	18	-
Loans held-for-sale		-	-	-	-	3,151	3,151	-	-
	$	16,662	2,153	7,815	26,630	2,282,745	2,309,375	623	7,192

2017		30-59 Days Past Due	60-89 Days Past Due	90 Days Or Greater	Total Past Due	Current	Total Loans	> 90 Days and Accruing	Non-Accrual Loans
Commercial and industrial	$	559	148	8,217	8,924	244,482	253,406	23	8,194
Commercial mortgages		152	-	2,400	2,552	727,842	730,394	-	2,400
Residential - first lien		849	1,038	2,000	3,887	491,788	495,675	-	2,000
Residential - junior lien		977	152	400	1,529	132,790	134,319	-	400
Consumer:									
Automobile - Indirect		5,047	897	292	6,236	487,522	493,758	292	-
Other		133	105	15	253	30,428	30,681	15	-
Loans held-for-sale		-	-	-	-	5,645	5,645	-	-
Total	$	7,717	2,340	13,324	23,381	2,120,497	2,143,878	330	12,994

A summary of information regarding impaired loans as of and for the years ended December 31, 2018 and 2017 follows (in thousands):

		2018	2017
Recorded investment at period end	$	7,192	12,994
Impaired loans with specific related allowance at period end	$	2,786	8,185
Amount of specific related allowance at period end	$	2,361	4,066
Average investment during the period	$	10,132	13,697
Interest income recognized on a cash basis during the period	$	149	86
Interest income forgone on impaired loans	$	743	464

The details of impaired loans follow (in thousands). "Recorded investment", "Unpaid Principal Balance", and "Specific Related Allowance" are as of the years ended December 31, 2018 and 2017 , respectively. "Average Recorded Investment" is a four-quarter rolling average for the respective periods. "Interest Income Recognized" is for the respective year-to-date periods:

		2018				
With no specific allowance		**Recorded Investment**	**Unpaid Principal Balance**	**Specific Related Allowance**	**Average Recorded Investment**	**Interest Income Recognized**
Commercial and industrial	$	888	892	-	673	-
Commercial mortgage		2,344	2,854	-	2,434	-
Residential mortgage - first lien		603	678	-	1,936	149
Residential mortgage - junior lien		571	575	-	592	-
Subtotal		4,406	4,999	-	5,635	149
With specific allowance						
Commercial and industrial		2,681	3,071	2,346	4,389	-
Residential mortgage - first lien		105	115	15	108	-
Subtotal		2,786	3,186	2,361	4,497	-
Total	$	7,192	8,185	2,361	10,132	149
Summary by portfolio:						
Commercial	$	5,913	6,817	2,346	7,496	-
Residential		1,279	1,368	15	2,636	149
Total	$	7,192	8,185	2,361	10,132	149

		2017				
With no specific allowance		**Recorded Investment**	**Unpaid Principal Balance**	**Specific Related Allowance**	**Average Recorded Investment**	**Interest Income Recognized**
Commercial and industrial	$	123	133	-	63	27
Commercial mortgage		2,400	3,108	-	3,716	1
Residential mortgage - first lien		1,886	2,216	-	2,115	58
Residential mortgage - junior lien		400	400	-	212	-
Subtotal		4,809	5,857	-	6,106	86
With specific allowance						
Commercial and industrial		8,071	8,492	4,043	7,434	-
Commercial mortgage		-	-	-	99	-
Residential mortgage - first lien		114	115	23	58	-
Subtotal		8,185	8,607	4,066	7,591	-
Total	$	12,994	14,464	4,066	13,697	86
Summary by portfolio:						
Commercial	$	10,594	11,733	4,043	11,312	28
Residential		2,400	2,731	23	2,385	58
Total	$	12,994	14,464	4,066	13,697	86

Troubled Debt Restructurings (TDR)

As of December 31, 2018, there were three commercial relationships totaling $4.8 million that were considered a TDR due to the nature of the concessions granted to the borrowers. The balances of the underlying loans are included in non-performing loans.

The first relationship totaling $3.1 million that was restructured in 2018. As of December 31, 2018, there were $1.9 million of impaired reserves included in allowance for loan loss. The amount of the impairment was measured based on the present value of expected future cash flows discounted at the loan's effective interest rate. The significant term modified was the deferral of all principal and interest payments for six months.

The second relationship totaling $1.6 million relationship was restructured in 2014. As of December 31, 2018, no impairment reserves were included in the allowance for loan losses based on the current valuation of collateral (net of costs to sell). The significant term modified was the monthly principal and interest amount. We agreed to forbear our rights under the default provisions in the original loan agreements on the condition that the borrower would make lower payments and provide certain financial information pursuant to the terms of a Forbearance Agreement, which has expired. The Borrower continues to make monthly payments of $1,000.

The third relationship totaling $0.1 million was restructured in 2017. The balance was modified for the advancement of taxes and payments were subsequently increased to accommodate the addition of an escrow account.

As of December 31, 2018, there were six residential loans totaling $1.2 million that were classified as TDR's. Two loans totaling $0.3 million became TDR's in 2017, one $0.1 million loan became a TDR in 2015, one $0.4 million loan became a TDR in 2014 and the remaining two loans totaling $0.4 million became TDR's in 2013.

(5) Premises and Equipment

A summary of premises and equipment at December 31, 2018 and 2017, follows (in thousands):

	2018	2017
Land and land improvements	$ 962	945
Buildings and leasehold improvements	28,425	27,569
Furniture, fixtures and equipment	23,039	21,996
	52,426	50,511
Less accumulated depreciation and amortization	39,534	36,761
Premises and equipment - net	$ 12,892	13,750

Depreciation and amortization expense amounted to $2.8 million and $2.9 million, for the years ended December 31, 2018 and 2017, respectively.

In June 2008, the Company completed the sale and subsequent lease-back of six banking offices. The gross gain of $1.6 million was deferred and included in Accrued Interest Payable and Other Liabilities in the Consolidated Balance Sheets and is amortized as a credit to Occupancy expenses on a straight-line basis for 15 years through 2023, the term of the underlying leases.

(6) Loan Servicing Assets

Changes in loan servicing assets, recorded in Other Assets in the Consolidated Balance Sheets, for each of the years presented, and the respective period-end estimated fair values were as follows (in thousands):

	2018		2017	
	Book Value	Estimated Fair Value	Book Value	Estimated Fair Value
Balance at January 1,	$ 2,396	$ 4,330	$ 2,675	$ 4,298
Originations	281		518	
Amortization	(737)		(797)	
Balance at December 31,	$ 1,940	$ 4,238	$ 2,396	$ 4,330

Included in Loan servicing income, net, are gross servicing fees earned of $1.6 million and $1.7 million, for the years ended December 31, 2018 and 2017, respectively. Amortization expense of loan servicing assets for the next five years is estimated to be $0.6 million, $0.4 million, $0.4 million, $0.3 million, and $0.2 million.

The estimated fair value of loan servicing rights may vary significantly in subsequent periods due to changing interest rates and the effect thereof on prepayment speeds. Additionally, estimated fair value assumes there are a willing buyer and willing seller in the transaction. Management does not intend to sell these servicing rights.

The key economic assumptions used to determine the fair value of loan servicing rights at December 31, 2018 and 2017 were a discount rate of 12.5% and 13.0% and weighted average portfolio maturity of 19.7 years and 19.9 years at December 31, 2018 and 2017, respectively. The sensitivity of fair value to changes in certain portfolio characteristics at each year end are summarized in the table that follows (dollars in thousands). These calculated sensitivities are hypothetical, and actual changes in the fair value of loan servicing rights may differ significantly from the amounts presented herein. The effect of a variation in a particular assumption or characteristic on the fair value of the servicing rights is calculated without changing any other assumption. However, in practice, changes in one factor may result in changes in another which may magnify or counteract the sensitivities. The changes in assumptions are presumed to be instantaneous.

	2018	2017
Weighted-average prepayment speed	133 %	153 %
Impact on fair value of 20% adverse change	$ (163)	$ (231)
Impact on fair value of 20% positive change	$ 217	$ 231
Weighted-average current coupon for similar loans	3.86 %	3.81 %
Impact on fair value of 100 basis point adverse change	$ (380)	$ (924)
Impact on fair value of 100 basis point positive change	$ 217	$ 289

(7) Time Deposits

At December 31, 2018 the scheduled maturity of time deposits was as follows (in thousands):

2019	$	269,020
2020		82,999
2021		43,885
	$	395,904

Time deposits of $250,000 or more amounted to $157.8 million at December 31, 2018, and $72.9 million at December 31, 2017.

(8) Borrowings

Borrowings amounted to $305.1 million and $238.4 million from the Federal Home Loan Bank of New York, net of discount, a $0.2 million and $0.3 million non-interest bearing contingent payment with no stated maturity for the acquisition of OBS for the years ended December 31, 2018 and 2017, respectively.

The following tables summarize the Federal Home Loan Bank of New York borrowings as of December 31, 2018 and 2017:

December 31, 2018 (in thousands)				
Type	**Maturity Date**	**Interest Rate**		**Amount**
Overnight	January 1, 2019	2.60%	$	55,100
Term	February 2, 2020	1.81%		50,000
Term	February 16, 2021	1.94%		50,000
Term	February 7, 2022	2.28%		50,000
Term	February 10, 2023	3.20%		50,000
Term	February 6, 2024	2.67%		50,000
			$	305,100

December 31, 2017 (in thousands)				
Type	**Maturity Date**	**Interest Rate**		**Amount**
Overnight	January 1, 2018	1.53%	$	38,400
Term	February 2, 2020	1.81%		50,000
Term	February 16, 2021	1.94%		50,000
Term	February 7, 2022	2.28%		50,000
Term	February 6, 2024	2.67%		50,000
			$	238,400

Advances under the overnight line of credit with the FHLB of New York are payable on demand and generally bear interest at the federal funds rate plus 0.10%. The Company also has access to the FHLB's Term Advance Program, which allows the Bank to borrow at various terms and rates, subject to the Bank’s pledging of eligible collateral. Advances under the Federal Reserve Bank of New York are payable the following business day and bear interest at the Federal Reserve Bank of New York’s discount rate for primary credit, which is generally 0.25% to 1.00% above the target federal funds rate.

The following table presents information about the Company's available lines of credit and related loan collateral at December 31, 2018 (in thousands). Amounts utilized include borrowings, and undrawn letters of credit in the Company's favor of $1.4 million.

	Amount Utilized	Unused	Collateralized by	Carrying Value of Collateral
Federal Home Loan Bank of New York	$ 251,419	$ 248,688	Residential mortgages	$ 321,590
			Commercial mortgages	$ 178,517
			FHLB stock	$ 15,349
Federal Reserve Bank of New York	$ -	$ 748,867	Indirect automobile loans	$ 385,843
			Commercial loans and mortgages	$ 363,024

(9) Junior Subordinated Debentures and Interest Rate Swap Agreements

In September 2007, the Company issued $20.6 million of unsecured, 30-year junior subordinated deferrable interest debentures (T3) through a wholly-owned business trust. The debentures carried a fixed interest rate of 6.32% per annum for the initial five years, then converted to an adjustable rate for the remaining twenty-five years at LIBOR plus 1.44%, adjustable quarterly (2.40% at December 31, 2018). The debentures' final maturity is December 2037, and became callable, in whole or in part, at par beginning December 2012 at the Company's option, and subject to Federal Reserve Bank of New York approval. Interest is payable quarterly. Interest payments can be deferred for up to five years, but would restrict the Company's ability to pay dividends. At December 31, 2018, these debentures were considered Tier I Capital for regulatory purposes.

In December 2012, the Company became exposed to interest rate risk as a result of the timing of changes in interest rates associated with T3. In consideration of the end of the fixed-rate period, the Company entered into a forward interest rate swap agreement, which became effective on December 15, 2012 and expires on December 15, 2022. This interest rate swap agreement (notional value of $20.6 million) modifies the repricing characteristics of the debenture from a floating-rate debt (LIBOR +1.44%) to a fixed-rate debt (3.859%).

In June, 2006, the Company issued $30.9 million of unsecured, 30-year floating rate junior subordinated deferrable interest debentures (T2) through a wholly-owned business trust. The debentures carry an interest rate of 3-month LIBOR plus 1.40% (2.36% at December 31, 2018). Other significant terms of the debenture are similar to T3, except the debentures' final maturity is June 2036, and became callable, in whole or in part, at par after June 2012.

As with T3, the Company is exposed to interest rate risk for T2. In order to reduce this risk, the Company has entered into a series of interest rate swap agreements since 2007 with the current agreement effective as of June 15, 2011 and expiring on June 15, 2021. The agreement (notional value of $30.9 million) modifies the repricing characteristics of T2 from a floating-rate debt (LIBOR +1.40%) to a fixed-rate debt (4.81%).

With both swap agreements the Company designated them as a cash flow hedges, and they are intended to protect against the variability of cash flows associated with the debentures. Therefore, the effective portion of the swap’s unrealized gain or loss is recorded as a component of other comprehensive income. The ineffective portion of the unrealized gain or loss, if any, is reported in other operating income. The swap agreements are carried at fair value in other liabilities on the Consolidated Balance Sheets. Amounts receivable or payable are recognized as accrued under the terms of the agreements, and the net differential is recorded as an adjustment to interest expense.

The Company also utilizes interest rate swap agreements for certain variable rate commercial loans whereby the Company and clients enter into interest rate swap agreements that result in borrowers paying a fixed rate to the Company and the Company paying a variable rate to borrowers. The transaction allows the borrower to effectively convert a variable rate loan to a fixed rate. The Company then enters into separate interest rate swap agreements having exact opposite matching terms with another financial institution. The Company does not designate either interest rate swap as hedging instruments. Because the terms of the swaps with the borrower and the other financial institution offset each other, with the only difference being counterparty credit risk, changes in the fair value of the underlying derivative contracts are not materially different and do not significantly impact the Company’s results of operation. Notional values associated with the interest rate swaps, under agreements with both the clients and the other financial institution, amounted to $133.4 million as of December 31, 2018 and $101.8 million as of December 31, 2017. The fair value is recorded in other assets and other liabilities on the Consolidated Balance Sheets.

(10) Income Taxes

Total income taxes for each of the years ended December 31, were allocated as follows (in thousands):

	2018	2017
Income from operations	$ 10,131	16,790
Change in stockholders' equity for unrealized (loss) gain on securities available for sale	(115)	22
Change in stockholders' equity for unrealized gain on fair value of interest rate swap	267	434
	$ 10,283	17,246

The components of income tax expense relating to income from operations for each of the years ended December 31, follows (in thousands):

	2018	2017
Current:		
Federal	$ 8,234	11,600
State	1,345	1,062
	9,579	12,662
Deferred:		
Federal	473	3,968
State	79	160
	552	4,128
	$ 10,131	16,790

Income tax expense differed from the amounts computed by applying the applicable U.S. Federal corporate tax rates to pretax income from operations for each of the years ended December 31, follows (dollars in thousands):

	2018	2017
Tax expense at statutory rate of 21% and 35%, respectively	$ 9,669	13,586
Tax-exempt interest	(554)	(881)
Interest expense disallowance	19	19
State taxes, net of Federal benefit	1,124	795
Stock options	(315)	(328)
Nondeductible operating expenses	37	27
Change in valuation allowance for deferred tax assets	(14)	14
Effect of future statutory tax rate change	-	3,732
Other	165	(174)
Total	$ 10,131	16,790
Effective tax rate	22.0%	43.3%

The tax effects of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities at December 31, 2018 and 2017, are presented below (in thousands):

	2018	2017
Deferred tax assets:		
Allowance for loan losses	$ 5,563	5,389
Incentive stock and retirement plans	1,917	1,555
Stock options	49	49
Depreciation	633	562
Gain on sale of premises and equipment	165	204
Minority-owned entities	139	264
Unrealized loss on securities and swaps, net	1,437	1,617
Net operating loss carryforwards	1,166	1,214
Deferred tax assets before allowance	11,069	10,854
Valuation allowance	(1,120)	(1,135)
Deferred tax assets	9,949	9,719
Deferred tax liabilities:		
Loan servicing rights	499	616
Intangible assets, net	1,262	1,097
Prepaid expenses	439	454
Deferred Gain on Sale of Investment	973	-
Other	103	157
Deferred tax liabilities	3,276	2,324
Net deferred tax asset	$ 6,673	7,395

On December 22, 2017 the "Tax Cuts and Jobs Act of 2017" was enacted into law. This law reduced the statutory federal tax rate from 35% to 21% beginning in 2018. The $3.7 million effect on deferred tax assets and liabilities from this change in tax rate was recognized during 2017, and is presented as "Effect of future statutory tax rate change" in the reconciliation of total income tax expense to tax expense computed by applying the applicable U.S. Federal corporate tax rate to pretax income from operations.

Net deferred tax assets are included in other assets. Realization of deferred tax assets is dependent upon the generation of future taxable income or the existence of sufficient taxable income within the carryback period. A valuation allowance is provided when it is more likely than not that some portion of the deferred tax assets will not be realized. In assessing the need for a valuation allowance, management considers the scheduled reversal of deferred tax liabilities, the level of historical taxable income, and projected future taxable income over the periods in which the temporary differences comprising the deferred tax assets are deductible. Based on its assessment, management determined that a valuation allowance was needed for the federal net operating loss and mortgage recording tax credit carryforwards. The federal net operating loss carryforwards of approximately $5.6 million, which begin to expire in 2026, were generated by a nonbank subsidiary before the subsidiary was included in the Company's consolidated federal tax return. Therefore, their utilization is limited under the Internal Revenue Code and related Treasury Regulations.

The Company recognizes interest and penalties accrued on any unrecognized tax benefits as a component of income tax expense. No material amount of interest expense was recognized during 2018 and 2017, for any unrecognized tax benefits. The Company is not subject to U.S. Federal tax examinations or state tax examinations for years before 2015. The Company is currently being examined by Internal Revenue Service for the 2015 return.

(11) Stockholder's Equity

Payment of dividends by the Bank to the Company is limited or restricted in certain circumstances. According to federal banking law, the approval of the Office of the Comptroller of the Currency (OCC) is required for the declaration of dividends in any year in which dividends exceed the total of net income for that year plus retained income for the preceding two years. At December 31, 2018, approximately $63.6 million was available for dividends to the Company without the approval of the OCC. Payment of dividends by the Company's non-bank trust subsidiary is also restricted by the OCC, its regulator. No dividends are available for payment by these companies without regulatory approval.

The Company paid a $2.30 per share dividend on common stock to shareholders on February 1, 2018 and a $2.50 per share dividend on common stock to shareholders on August 1, 2018. In 2017, the Company paid a $2.00 per share dividend on common stock to shareholders on February 1, 2017 and a $2.30 per share dividend on common stock to shareholders on August 1, 2017.

(12) Earnings Per Share

Basic and diluted earnings per share for the years ended December 31, 2018 and 2017, were computed as follows (in thousands, except share and per-share data):

		2018	2017
Basic Earnings Per Share:			
Net income applicable to Canandiagua National Corporation	$	35,912	22,025
Weighted average common shares outstanding		1,874,555	1,874,284
Basic earnings per share	$	19.16	11.75
Diluted Earnings Per Share:			
Net income applicable to Canandiagua National Corporation	$	35,912	22,025
Weighted average common shares outstanding		1,874,555	1,874,284
Effect of assumed exercise of stock options		18,584	27,734
Total		1,893,140	1,902,018
Diluted earnings per share	$	18.97	11.58

(13) Retirement Plans

Retirement Plans

The Company has a combined profit sharing and 401(k) Plan covering substantially all employees upon completion of 1,000 hours of service. Contributions to the Plan are determined annually by the Company’s Board of Directors. The Plan is subject to a minimum contribution of 3% of eligible compensation. It is the Company's policy to annually fund current costs as they accrue. Expenses of the Plan amounted to $3.7 million, and $3.5 million, for the years ended December 31, 2018 and 2017, respectively.

Employee Stock Ownership Plan

The Company has an employee stock ownership plan (ESOP) for employees of the Company. Annual contributions are made at the discretion of the Board of Directors. ESOP expense amounted to $0.3 million, for each of the years ended December 31, 2018 and 2017. Shares distributed to a participant upon termination of service are subject to a put option whereby the participant may cause the ESOP’s Trust to purchase the shares at fair value. At both December 31, 2018 and 2017, the ESOP held 29,929 shares with an estimated fair value, at the respective dates, of $5.6 million and $4.9 million.

Supplemental Executive Retirement Plans

The Company has two unfunded, non-qualified, supplemental executive retirement plans (SERP) covering certain executives designed to compensate for the portion of cash compensation unable to be included in the profit sharing and 401(k) plan, because of limitations of the plan’s design and of the Internal Revenue Code. The Company had accrued a liability of $1.5 million and $1.4 million at December 31, 2018 and 2017, respectively, for these SERPs. Expenses of these SERP’s amounted to $252,000 in 2018 and $174,000 in 2017.

(14) Stock-Based Compensation Plans

The Company has two stock-based compensation plans (Stock Option Plan and Stock Appreciation Rights Plan) for executives, which are described below. Amounts recognized in the Consolidated Financial Statements with respect to these plans are as follows (in thousands):

		2018	2017
Stock option plan	$	-	-
Stock appreciation rights plan		2,639	1,321
Pre-tax cost of plans included in salaries and employee benefits expenses	$	2,639	1,321
Amount of related income tax benefit recognized in net income	$	(686)	(528)

Stock Option Plan

The Company's stock option plan authorized grants of options to purchase up to 192,000 shares of common stock. All 192,000 options available were granted by year-end 2004. There are no future expenses associated with the unvested options. The options were granted with an exercise price equal to the fair value of the common stock on the grant date based on the most recent public stock sale known to the Company immediately preceding the grant. The options are exercisable either five years from the date of grant, or at the later of age 55 or 15 years of continuous employment with the Company, or at normal retirement age (65).

The following summarizes outstanding and exercisable options at December 31, 2018:

	# Shares Subject to Options		Weighted Average Exercise Price
Options outstanding at beginning of the year	38,682	$	47.39
Granted	-	$	-
Exercised	12,620	$	45.98
Expired	-	$	-
Forfeited	3,432	$	49.74
Options outstanding at year end	22,630	$	47.82
Options exercisable at year end	22,630	$	47.82
Options available for future grants	none		

At December 31, 2018, the intrinsic value of outstanding options, all of which were vested, was approximately $3.2 million. The intrinsic value of options exercised during the years ended December 31, 2018 and 2017, were $1.6 million and $0.9 million, respectively. The intrinsic value of options forfeited during the year ended December 31, 2018 was $0.5 million. No options were forfeited in 2017. No options vested in 2018 or 2017.

Options outstanding at December 31, 2018, had exercise prices ranging from $37.57 to $73.46. The weighted average expected life of the options is one year. Since the options have no stated expiration date, the expected life is calculated as the number of years from grant date to the grantee's 65th birthday.

The source of shares issued upon exercise has historically been, and is expected to be, treasury shares. From time to time, the Company expects to purchase shares for treasury to be used for these exercises. The amount of shares, timing and cost of these purchases cannot be determined, as the Company does not know when and in what quantity participants will exercise their options.

Stock Appreciation Rights Plan

The Company has an incentive stock plan for executives which allows for the award of Stock Appreciation Rights (SARs). The number of rights issued is based upon a formula utilizing the compensation of the grantees and actual return on beginning equity relative to the budgeted return for each year. SARs represent the right to receive payment in cash or stock, at the Compensation Committee of the Board of Director’s option, equal to the amount, if any, by which the market value per share of common stock on the date of exercise exceeds the SARs grant price. Long-term SARs are exercisable at the later of age 55 or 15 years of continuous employment with the Company or at normal retirement age (65). Medium-term SARs are exercisable five years from the date of grant or upon retirement. The vesting schedule is consistent with the time periods in which the SARs become exercisable. The following summarizes the activity of these rights as of and for the year ended December 31, 2018.

	Long-term SARs			Medium-term SARs		
	# Rights		Weighted Average Grant Price	# Rights		Weighted Average Grant Price
Rights outstanding, January 1, 2018	72,233	$	117.99	55,775	$	128.43
Granted	13,693	$	163.73	9,132	$	163.73
Exercised	4,756	$	93.79	10,720	$	97.25
Forfeited	18,212	$	114.31	3,650	$	154.52
Expired	-	$	-	-	$	-
Rights outstanding at December 31, 2018	62,958	$	130.83	50,537	$	139.53
Rights exercisable at December 31, 2018	46,487	$	121.54	17,153	$	109.06

In February 2018, certain executives were awarded a total of 13,693 long-term SARs and 9,132 medium-term SARs, all at a grant price of $163.73 per share, the then-current market value (based on the most recent public stock sale administered by the Trust Department known to the Company immediately preceding the effective grant date) of the Company's common stock.

During 2018, 4,756 long-term SARs were exercised with a fair value of $349,000, and 10,720 medium-term SARs were exercised with a fair value of $899,000. During 2017, $29,841 long-term SARs were exercised with a fair value of $1,635,000, and 10,748 medium-term SARs were exercised with a fair value of $601,000. The fair value of awards vested during years ended December 31, 2018 and 2017, amounted to $231,000 and $445,000, respectively. During 2018, 18,212 long-term SARs were forfeited with a fair value of $794,000 and 3,650 medium-term SARs were forfeited with a fair value of $105,000. No SARs were forfeited in 2017.

The weighted average estimated per-right fair values, as of December 31, 2018 and 2017, are presented below. Fair value was estimated using the Black-Scholes-Merton option-pricing model with the following assumptions. No forfeitures are assumed, as generally none are anticipated for the current outstanding awards.

	2018		2017	
Right Type	LTS	MTS	LTS	MTS
Per-right fair value	$51.25	$43.24	$38.66	$29.04
Expected dividend yield	2.69%	2.69%	2.69%	2.69%
Risk-free interest rate	2.53%	2.53%	2.09%	2.09%
Expected Life	3.3 year	3.3 years	3.9 years	3.9 years
Volatility	3.61%	3.61%	3.05%	3.05%

Long-term SAR's outstanding and medium-term SARs outstanding (both exercisable and unexercisable) at December 31, 2018, had exercise prices ranging from $78.98 to $163.73. The weighted average expected life of these rights is three years. Since these rights have no stated expiration date, the expected life is calculated as the number of years from grant date to the grantee's 60th birthday, which is the historical life for similar past rights. Based upon current assumptions, the estimated compensation cost related to non-vested rights not yet recognized is $2.2 million, which is expected to be recognized over a weighted average period of five years. The Company had accrued a liability of $6.0 million and $4.6 million at December 31, 2018 and 2017, respectively, representing the accumulated fair-value vested obligation of these rights under the plan.

(15) Leases

The Company leases certain buildings and office space under operating lease arrangements. Rent expense, net of rent received and deferred-gain on sale-leaseback, under these arrangements amounted to $2.8 million in both 2018 and 2017. Real estate taxes, insurance, maintenance, and other operating expenses associated with leased buildings and office space are generally paid by the Company.

A summary of non-cancellable, long-term operating lease commitments as of December 31, 2018, follows (in thousands):

Years ending December 31,	Amount
2019	$ 2,966
2020	2,817
2021	2,663
2022	2,661
2023	1,918
2024 and after	2,751
Total	$ 15,776

(16) Commitments and Contingencies

In the normal course of business, various commitments and contingent liabilities are outstanding. The following table presents the notional amount of the Company's significant commitments and their respective carrying amount, where applicable, for the years ended December 31, 2018 and December 31, 2017. Most of these commitments are not included in the Company's Consolidated Balance Sheets (in thousands).

	2018		2017	
	Notional Amount	Carrying Amount	Notional Amount	Carrying Amount
Commitments to extend credit:				
Commercial lines of credit	$ 230,419	-	198,880	-
Commercial real estate and construction	85,189	-	58,693	-
Residential real estate at fixed rates	4,706	-	3,406	-
Home equity lines of credit	425,785	-	396,085	-
Unsecured personal lines of credit	27,204	-	27,440	-
Standby and commercial letters of credit	5,066	(76)	4,592	(69)
Commitments to sell real estate loans	3,151	-	5,645	-

Commitments to extend credit are agreements to lend to customers and generally have fixed expiration dates or other termination clauses that may require payment of a fee, the amount of which is immaterial. Standby and commercial letters of credit are conditional commitments issued to guarantee the performance of a customer to a third party and also require payment of a fee. Standby letters of credit generally are contingent upon the failure of the customer to perform according to the terms of an underlying contract with a third party, whereas commercial letters of credit are issued to facilitate commerce and typically result in the commitment being funded when the underlying transaction is consummated between the customer and third party. Because many commitments and almost all letters of credit expire without being funded in whole or in part, the notional amounts are not estimates of future cash flows. The credit risk associated with commitments to extend credit and standby and commercial letters of credit is essentially the same as that involved with extending loans to customers and is subject to normal credit policies. The Company's credit policy generally requires customers to provide collateral, usually in the form of customers' operating assets or property, prior to disbursement of approved loans.

Commitments to originate fixed-rate loans are made when a borrower executes a rate-lock agreement. At the time of execution, the Company generally charges a rate-lock fee, which approximates the fair value of the Company's commitment. These commitments usually have terms ranging from 45 to 90 days. Concurrently, the Company enters into commitments to sell certain fixed-rate residential real estate loans (usually those subject to the foregoing rate-locks). These commitments to sell are recorded in the consolidated balance sheet at estimated fair value.

The Company has committed $3.0 million as a limited partnership investment to Cephas Capital Partners, II. This Small Business Investment Company (SBIC) is a community-bank backed mezzanine finance company. It is a follow-on investment to our current investment in Cephas Capital Partners. At December 31, 2018, the Company had a remaining unfunded commitment of $1.5 million. This investment is carried in Other Assets on the Consolidated Balance Sheets.

The Company has committed $0.5 million for an investment in Trillium Lakefront Partners, LLC. This venture capital fund is a community-backed initiative in support of new business and job growth in the Company's market area. At December 31, 2018, the Company had a remaining unfunded commitment of less than $0.1 million. This investment is carried in Other Assets on the Consolidated Balance Sheets.

Under the terms of the OBS purchase agreement, of the $1.0 million contingency payment, OBS is obligated to make future payments totaling $0.2 million.

In the normal course of business, the Company has various contingent liabilities outstanding that are not included in the Consolidated Financial Statements. Management does not anticipate any material losses as a result of these contingent liabilities.

(17) Regulatory Matters

The Company and its subsidiaries are 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 financial statements. Under capital adequacy guidelines and the regulatory framework for prompt corrective action, the Company and its subsidiaries must meet specific capital guidelines that involve quantitative measures of the Company's and Bank's assets, liabilities, and certain off-balance-sheet items calculated under regulatory accounting practices. The capital amounts and classifications are also subject to qualitative judgments by regulators about components, risk weightings, and other factors.

Quantitative measures established by regulation to ensure capital adequacy require the Company and Bank to maintain minimum amounts and ratios (as set forth in the table following) of total, Common Equity Tier I, and Tier I capital (as defined in the regulations) to risk-weighted assets (as defined), and of Tier I capital to average assets (as defined). Under the BASEL III Capital Rules, a capital conservation buffer was implemented, which must be added to each of the minimum capital ratios and is designed to absorb losses during periods of economic stress. The capital conservation buffer began being phased-in on January 1, 2016 and will range from 0.625% in 2016 to 2.5% when fully phased-in. If a banking organization fails to hold capital above minimum capital ratios, including the capital conservation buffer, it will be subject to certain restrictions on capital distributions and discretionary bonus payments. Management believes, as of December 31, 2018, that the Company and Bank met all capital adequacy requirements to which they are subject. The Company's trust subsidiary, Canandaigua National Trust Company of Florida, must also meet minimum capital requirements as set forth by their regulators. As of December 31, 2018, it complied with its minimum capital requirements.

As of December 31, 2018, and as of the most recent notification from regulators, the Company and the Bank are well-capitalized under the regulatory framework for prompt corrective action. To be categorized as well-capitalized, the Company and Bank must maintain a minimum total risk-based, Common Equity Tier I risk-based, Tier I risk-based, and Tier I leverage ratios as set forth in the table below. Subsequently, there have been no conditions or events which management believes has changed the Company's or Bank's category.

	Regulatory Capital as of December 31, 2018							
	Actual Regulatory Capital		Minimum Capital Required - Basel III Phase-In Schedule		Minimum Capital Required - Basel III Fully Phased-In		Required to be Considered Well-Capitalized	
(Dollars in thousands)	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Leverage capital (Tier 1) as percent of three-month average assets:								
Company	$ 272,179	9.62%	$ 113,138	4.00%	$ 113,138	4.00%	$ 141,422	5.00%
Bank	$ 262,129	9.35%	$ 112,183	4.00%	$ 112,183	4.00%	$ 140,229	5.00%
As percent of risk-weighted, period-end assets								
Core capital (Common Equity Tier 1)								
Company	$ 220,632	9.46%	$ 148,648	6.38%	$ 163,222	7.00%	$ 151,563	6.50%
Bank	$ 262,129	11.30%	$ 147,876	6.38%	$ 162,373	7.00%	$ 150,775	6.50%
Core capital (Tier 1)								
Company	$ 272,179	11.67%	$ 183,624	7.88%	$ 198,198	8.50%	$ 186,539	8.00%
Bank	$ 262,129	11.30%	$ 182,670	7.88%	$ 197,168	8.50%	$ 185,570	8.00%
Total capital (Tiers 1 and 2)								
Company	$ 293,822	12.60%	$ 230,259	9.88%	$ 244,832	10.50%	$ 233,174	10.00%
Bank	$ 283,772	12.23%	$ 229,062	9.88%	$ 243,560	10.50%	$ 231,962	10.00%

	Regulatory Capital as of December 31, 2017							
	Actual Regulatory Capital		Minimum Capital Required - Basel III Phase-In Schedule		Minimum Capital Required - Basel III Fully Phased-In		Required to be Considered Well-Capitalized	
(Dollars in thousands)	Amount	Ratio	Amount	Ratio	Amount	Ratio	Amount	Ratio
Leverage capital (Tier 1) as percent of three-month average assets:								
Company	$ 247,058	9.45%	$ 104,573	4.00%	$ 104,573	4.00%	$ 130,716	5.00%
Bank	$ 225,833	8.73%	$ 103,538	4.00%	$ 103,538	4.00%	$ 129,422	5.00%
As percent of risk-weighted, period-end assets								
Core capital (Common Equity Tier 1)								
Company	$ 195,511	8.98%	$ 125,126	5.75%	$ 152,327	7.00%	$ 141,446	6.50%
Bank	$ 225,833	10.41%	$ 124,739	5.75%	$ 151,856	7.00%	$ 141,010	6.50%
Core capital (Tier 1)								
Company	$ 247,058	11.35%	$ 157,767	7.25%	$ 184,968	8.50%	$ 174,088	8.00%
Bank	$ 225,833	10.41%	$ 157,280	7.25%	$ 184,397	8.50%	$ 173,550	8.00%
Total capital (Tiers 1 and 2)								
Company	$ 268,019	12.32%	$ 201,289	9.25%	$ 228,490	10.50%	$ 217,610	10.00%
Bank	$ 246,794	11.38%	$ 200,667	9.25%	$ 227,785	10.50%	$ 216,938	10.00%

(18) Fair Values of Financial Instruments

Current accounting pronouncements require disclosure of the estimated fair value of financial instruments. Fair value is generally defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly, non-distressed sale between market participants at the measurement date. With the exception of certain marketable securities and one-to-four-family residential mortgage loans originated for sale, the Company's financial instruments are not readily marketable and market prices do not exist. The Company, in attempting to comply with accounting disclosure pronouncements, has not attempted to market its financial instruments to potential buyers, if any exist. Since negotiated prices in illiquid markets depend upon the then present motivations of the buyer and seller, it is reasonable to assume that actual sales prices could vary widely from any estimate of fair value made without the benefit of negotiations. Additionally, changes in market interest rates can dramatically impact the value of financial instruments in a short period of time. Finally, the Company expects to retain substantially all assets and liabilities measured at fair value to their maturity or call date. Accordingly, the fair values disclosed herein are unlikely to represent the instruments' liquidation values, and do not, with the exception of securities, consider exit costs, since they cannot be reasonably estimated by management.

Accounting principles establish a three-level valuation hierarchy for fair value measurements. The valuation hierarchy is based upon the transparency of inputs to the valuation of an asset or liability as of the measurement date. A financial instrument's categorization within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The three levels are defined as follows.

- Level 1 – inputs to the valuation methodology are quoted prices (unadjusted) for identical assets or liabilities in active markets.
- Level 2 – inputs to the valuation methodology include quoted prices for similar assets and liabilities in active markets, and inputs that are observable for the asset or liability, either directly or indirectly, for substantially the full term of the financial instrument.
- Level 3 – inputs to the valuation methodology are unobservable and significant to the fair value measurement.

The estimated fair values and the valuation hierarchy of the Company's financial instruments as of December 31, 2018 and December 31, 2017 are as follows (in thousands):

		2018		2017	
Financial Assets:	Fair Hierarch	Carrying Amount	Fair Value	Carrying Amount	Fair Value
Cash and equivalents	1	$ 69,324	69,324	57,237	57,237
Equity securities	1	8,717	8,717	-	-
Debt securities, available-for-sale	1, 2	343,199	343,199	305,511	305,511
Debt securities, held-to-maturity	2	55,277	55,227	85,172	85,131
FHLB stock and Federal Reserve Bank stock	3	17,089	17,089	13,441	13,441
Loans-net	3	2,306,600	2,276,081	2,139,645	2,103,087
Financial Liabilities:					
Deposits:					
Demand, savings and money market accounts	3	$ 1,845,081	1,845,081	1,867,445	1,867,445
Time deposits	3	395,904	398,588	271,449	269,348
Borrowings	3	305,322	297,692	238,715	229,537
Junior subordinated debentures	2	51,547	45,314	51,547	47,419
Other financial instruments:					
Interest rate swap agreements, net	2	$ 626	626	1,572	1,572
Letters of credit	2	76	76	69	69

The following methods and assumptions were used to estimate the fair value of each class of financial instrument:

Cash and Equivalents

For these short-term instruments that generally mature in 90 days or less, or carry a market rate of interest, the carrying value approximates fair value.

Securities

Fair values for securities are determined using independent pricing services and market-participating brokers, or matrix models using observable inputs. The pricing service and brokers use a variety of techniques to arrive at fair value including market maker bids, quotes and pricing models. Inputs to their pricing models include recent trades, benchmark interest rates, spreads, and actual and projected cash flows. Management obtains a single market quote or price estimate for each security. None of the quotes or estimates is considered a binding quote, as management would only request a binding quote if management had the positive intent to sell the securities in the foreseeable future and management believed the price quoted represented one from a market participant with the intent and the ability to purchase. Management evaluates the supplied price quotes against expectations of general price trends associated with changes in the yield curve and by comparing prices to the last period's price quote. Management employs an internal matrix model for non-traded municipal securities. The matrix model considers observable inputs, such as benchmark interest rates and spreads.

ASU 2016-01, which was adopted by the Company as of January 1, 2018, requires the use of exit price notion when measuring the fair value of equity securities for disclosure purposes. The fair values for equity securities that are recorded at fair market value to comply with ASU 2016-01, are determined by quoted market prices in active markets, if available (Level 1). The equity securities change in fair market value is recorded in the income statement.

There is no market for stock issued by the Federal Home Loan Bank or the Federal Reserve Bank. Member banks are required to hold this stock. Shares can only be sold to the issuer at par. Fair value is estimated to equal book value.

Loans

Fair values are estimated for portfolios of loans with similar financial characteristics. Loans are segregated by interest type such as floating, adjustable, and fixed-rate, and by portfolios such as commercial, mortgage, and consumer.

The fair value of performing loans is calculated using an exit price notion. The Company's valuation methodology is determined by discounting scheduled cash flows through the loans' estimated maturity using estimated market discount rates that reflect the credit and interest rate risk inherent in the loan category. Factors included in the calculation include estimated prepayment speeds, discount rates, and repricing dates. Fair value is calculated at the instrument level and aggregated accordingly.

Delinquent loans (not in foreclosure) are valued using the method noted above, and also consider the fair value of collateral for collateral-dependent loans. While credit risk is a component of the discount rate used to value loans, delinquent loans are presumed to possess additional risk. Therefore, the calculated fair value of loans is reduced by the allowance for loan losses. Non-performing loans, at the instrument level, are removed from the calculation and assessed a fair value of $0.

The fair value of loans held for sale is estimated based on outstanding investor commitments or in the absence of such commitments, is based on current yield requirements or quoted market prices.

Deposits

The fair value of demand deposits, savings accounts, and money market accounts is the amount payable on demand at the reporting date. The fair value of fixed maturity time deposits is estimated using a discounted cash flow approach that applies current market rates to a schedule of aggregated expected maturities of time deposits.

Borrowings

The fair value of borrowings is based on quoted market prices for the identical debt when traded as an asset in an active market. If a quoted market price is not available, fair value is calculated by discounting scheduled cash flows through the borrowings' estimated maturity using current market rates.

Junior Subordinated Debentures

There is no active trading market for the Company's debentures. Therefore the fair value of junior subordinated debentures is determined using an expected present value technique based on market fixed spreads on similar debt compared to the Company's fixed spreads.

Interest Rate Swap Agreements (Swaps)

The fair value of swaps is the amount the Company would expect to pay to terminate the agreements and is based upon the present value of expected future cash flows using the LIBOR and Wall Street Journal Prime swap curves, the bases for the underlying interest rates.

Other Financial Instruments

The fair values of letters of credit and unused lines of credit approximate the fee charged to make the commitments.

(19) Fair Values Measurements

The following table presents for each of the fair-value hierarchy levels discussed in the previous Note the Company's assets and liabilities that are measured at fair value on a recurring and non-recurring basis at December 31, 2018 and December 31, 2017 by caption on the Consolidated Balance Sheet (dollars in thousands).

	2018			
	Quoted market prices in active markets (Level 1)	**Internal models with significant observable market parameters (Level 2)**	**Internal models with significant unobservable market parameters (Level 3)**	**Total carrying value in the Consolidated Balance Sheet**
Measured on a recurring basis:				
Assets				
Debt securities available-for-sale:				
U.S. Treasury	$ 2,513	-	-	2,513
enterprise obligations	-	204,452	-	204,452
State and municipal obligation	-	136,234	-	136,234
Equity securities	8,717	-	-	8,717
Interest rate swap agreements - non-designated	-	4,306	-	4,306
Total assets	$ 11,230	344,992	-	356,222
Liabilities				
Interest rate swap agreements - designated	$ -	626	-	626
Interest rate swap agreements - non-designated	-	4,306	-	4,306
Letters of credit	-	76	-	76
Total liabilities	$ -	5,008	-	5,008
Measured on a non-recurring basis:				
Assets				
Loans				
Loans-held-for-sale	$ -	3,151	-	3,151
Collateral dependent impaired loans	-	-	2,786	2,786
Other real estate owned	-	-	1,320	1,320
Loan servicing assets	-	-	1,940	1,940
Total assets	$ -	3,151	6,046	9,197

	2017			
	Quoted market prices in active markets (Level 1)	**Internal models with significant observable market parameters (Level 2)**	**Internal models with significant unobservable market parameters (Level 3)**	**Total carrying value in the Consolidated Balance Sheet**
Measured on a recurring basis:				
Assets				
Debt securities available-for-sale:				
U.S. Treasury	$ 503	-	-	503
U.S. government sponsored enterprise obligations	-	191,228	-	191,228
State and municipal obligation	-	109,190	-	109,190
Equity securities	4,590	-	-	4,590
Interest rate swap agreements - non-designated	-	2,530	-	2,530
Total assets	$ 5,093	302,948	-	308,041
Liabilities				
Interest rate swap agreements - designated	$ -	1,572	-	1,572
Interest rate swap agreements - non-designated	-	2,530	-	2,530
Letters of credit	-	69	-	69
Total liabilities	$ -	4,171	-	4,171
Measured on a non-recurring basis:				
Assets				
Loans				
Loans-held-for-sale	$ -	5,645	-	5,645
Collateral dependent impaired loans	-	-	8,185	8,185
Other assets				
Other real estate owned	-	-	315	315
Loan servicing assets	-	-	2,396	2,396
Total assets	$ -	5,645	10,896	16,541

The Company values impaired loans and other real estate owned at the time the loan is identified as impaired or when title to the property passes to the Company. The fair values of such loans and real estate owned are estimated using Level 3 inputs in the fair value hierarchy. Each loan's collateral and real estate property has a unique appraisal and management's consideration of any discount of the value is based on factors unique to each impaired loan and real estate property. In estimating fair value, management may use the most recent available appraisal or may obtain an updated appraisal when, in management's judgment, conditions have changed such that the most recent appraisal may not be reflective of current fair value. The significant unobservable input in determining the fair value is management's subjective discount on appraisals of the collateral securing the loan or real estate property, which ranges from 10%-50%. Collateral for impaired loans may consist of real estate and/or business assets including equipment, inventory and/or accounts receivable and the value of these assets is determined based on appraisals by qualified licensed appraisers hired by the Company. Appraised and reported values may be discounted based on management's historical knowledge, changes in market conditions from the time of valuation, estimated costs to sell, and/or management's expertise and knowledge of the client and the client's business.

The Company evaluates and values loan servicing assets on at least an annual basis at their lower of amortized cost or fair value. The fair values of these assets are estimated using Level 3 inputs in the fair value hierarchy. Fair value is determined through estimates provided by a third party or by management by reference to rights sold on similar loans during the quarter. When values are estimated by management using market prices for similar servicing assets, certain discounts may be applied to reflect the differing rights underlying the loan servicing contract. These discounts may range from 25 to 75 basis points of the principal balance of the underlying loan. Such discounts represent the significant unobservable input.

Board of Directors

Canandaigua National Corporation is honored to have so many distinguished community leaders on its Board of Directors.

(front row) Frank H. Hamlin, III, Esq.; Sue S. Stewart, Esq.; George W. Hamlin, IV, Esq.; Caroline C. Shipley; Daniel P. Fuller (back row) Lawrence A. Heilbronner-Kolthoff; Thomas S. Richards, Esq.; Alan J. Stone; Michael C. Goonan; Richard C. Fox; Robert G. Sheridan

Richard C. Fox
Director, Canandaigua National Corporation, 2008-present
Private Investor
President, Wendy's Restaurants of Rochester, Inc., 1976-2016
Genesee Valley Trust Company*
    Vice Chairman of the Board, April 25, 2017-March 1, 2018
    Chairman of the Board, 2010-April 24, 2017
    Director, 1998-March 1, 2018

Daniel P. Fuller
Canandaigua National Corporation
    Vice Chairman of the Board, January 1, 2011-present
    Chairman of the Board, 2008-2010
    Director, 1996-present
President and General Manager, Bristol Mountain Ski Resort, December 1984-present
General Manager, Roseland Water Park, 2003-present
Director and Treasurer, Ski Areas of New York (SANY), 1990-present
Director, UR Thompson Health System
Director, SnoCountry Ski Areas Association
Director, Canandaigua Country Club

Michael C. Goonan
Director, Canandaigua National Corporation, 2015-present
University of Rochester Medical Center (URMC)
    Senior Financial Advisor, 2015-present
    Vice President and CFO, 1995-2015
Financial Operations, Strong Memorial Hospital, 1984-1995
Consultant, Peat, Marwick, Mitchell & Co., 1975-1984
Board of Directors, Golisano Children's Hospital
Advisory Committee Member, Rochester Red Cross
Trustee, St. John Fisher College
Honorary Member, Board of Directors of the Catholic Family Center
Board of Directors, Pluta Cancer Center Foundation
Parish Council Member, Church of the Transfiguration

Frank H. Hamlin, III, Esq.
Canandaigua National Corporation
    Director, President, and CEO, March 29, 2013-present
    Director and President, January 1, 2011-present
    Director, 2004-present
The Canandaigua National Bank & Trust Company
    Director, President, and CEO, March 29, 2013-present
    Director and President, January 1, 2011-present
    Director, 2004-present
CNB Mortgage Company**
    Director and CEO, March 21, 2018-present
    Chairman of the Board and CEO, June 27, 2013-March 20, 2018
    Director, January 1, 2011-present
CNB Insurance Agency*
    Director, President, and CEO, April 24, 2013-present
    Director and President, 2011-present
Canandaigua National Trust Company of Florida*
    Director, President, and CEO, June 11, 2015-present
    Director, 2011 - present
Director, Genesee Valley Trust Company,* 2011-March 1, 2018
Manager and CEO, WBI OBS Financial, LLC,*** 2011-present
Director, OBS Holdings, Inc., 2016-present
Director, UR Thompson Health System, 2013-present
Croucher, Jones & Johns
    Of Counsel, 2007-2010
    Attorney, June 2001-2007

George W. Hamlin, IV, Esq.
Canandaigua National Corporation
    Chairman of the Board, January 1, 2011-present
    Chairman and CEO, January 1, 2011-March 28, 2013
    Director, President, and CEO, 1984-December 31, 2010
The Canandaigua National Bank & Trust Company
    Chairman, Officer, Senior Policy Advisor, and Consultant at Large, March 29, 2013-present
    Chairman, CEO, and Trust Officer, 1979-March 28, 2013
    Director, President, CEO, and Trust Officer, 1979-December 31, 2010
CNB Mortgage Company**
    Director, 1998-present
    Chairman and CEO, 1998-April 23, 2013
Chairman, Canandaigua National Trust Company of Florida,* 2009-present
Director, Genesee Valley Trust Company,* 2008-March 1, 2018
Director and CEO, CNB Insurance Agency,* 1995-April 23, 2013
Director, Federal Reserve Bank of New York, 1997-2002
Chair Emeritus, UR Thompson Health System
Chair, Board of Managers of the Eastman School of Music
Member, Eastman School of Music National Council
Director, University of Rochester Medical Center, 1985-present
    Senior Member, 2018-present
    Immediate Past Chair, 2015-2017
    Chairman, 2013-2014
    Vice Chair, 2011-2012
    Audit Chair, 2009-2011
Center for Governmental Research, 2002-present
    Fellow, 2011-present
    Director, 2002-2010

Board of Directors, cont.

Chairman, Investment Advisory Committee–Monroe Fund
Director, New York Kitchen (formerly New York Wine and Culinary Center)
Director and Vice President, Constellation Brands–Marvin Sands Performing Arts Center (CMAC), 2015-present
Trustee Emeritus, Rochester Museum and Science Center
Member, Dean's Advisory Council, SUNY Brockport School of Business and Management, 2016-present
Trustee, Colgate Rochester Divinity School, 2014-present
President, Canandaigua Area Development Corporation
Principal Member, Canandaigua Aircraft, LLC, 1999-present
Principal Member, Hamlin Consulting, LLC, 2016-present

Lawrence A. Heilbronner-Kolthoff

Canandaigua National Corporation
- Director, December 10, 2014-present
- Treasurer, Executive Vice President, and CFO, January 2014-December 31, 2018
- Executive Vice President, CFO, and Principal Accounting Officer, 2007-2013
- Senior Vice President, CFO, and Principal Accounting Officer, 2004-2006

The Canandaigua National Bank & Trust Company
- Director, December 10, 2014-present
- Executive Vice President, CFO, and Cashier, January 2012 - December 31, 2018
- Executive Vice President, CFO, 2007-December 31, 2018
- Senior Vice President, CFO, 2004-2006
- Vice President, Finance, 1998-2004

Owner and Principal, Heilbronner Consulting LLC – November 28, 2018-present
Director, Treasurer, Executive Vice President, and CFO, CNB Mortgage Company,** 2002-December 31, 2018
CNB Insurance Agency*
- Director, April 11, 2012 - present
- Director, Treasurer, and Executive Vice President, April 9, 2014-December 31, 2018
- Director and Secretary, April 11, 2012-April 8, 2014
- Executive Vice President, February 12, 2007-April 10, 2012
- Vice President, August 16, 1999-February 11, 2007

Executive Vice President and Chief Financial Officer, Canandaigua National Trust Company of Florida,* 2009-December 31, 2018
Director and Treasurer, Genesee Valley Trust Company,* 2008-March 1, 2018
OBS Holdings, Inc.
- Chairman, 2015-December 31, 2018
- Director, 2011- 2015

Manager, WBI OBS Financial, LLC,*** 2011-December 31, 2018

Thomas S. Richards, Esq.

Director, Canandaigua National Corporation, 2004-November 2010 and January 15, 2014-present
Attorney
Mayor, City of Rochester, 2011- 2013
Corporation Counsel, City of Rochester, January 1, 2006-November, 2010
Chairman, President, and CEO, RGS Energy Group, Inc., and Rochester Gas & Electric Corp, 1998-2002
Trustee and Audit Committee Member, Rochester Institute of Technology
Trustee and Audit Committee Member, University of Rochester
Director and Audit Committee Member, Rochester Area Community Foundation
Director, Sands Family Supporting Foundation
Director, University of Rochester Medical Center
Director, Greater Rochester Health Foundation
Director, Volunteer Legal Services Program
Director, Seneca Waterways Council, Boy Scouts of America

Robert G. Sheridan

Canandaigua National Corporation
- Director, 1992-present
- Director and Secretary, 1992-2011

The Canandaigua National Bank & Trust Company, 1971-2011
- Director, 1992-present
- Executive Vice President, Cashier, and CRA Officer, 2007-2011
- Senior Vice President and Cashier, 1989-2006

CNB Mortgage Company**
- Director and Secretary, 1998-March 21, 2018
- President, 2002-August 31, 2011

Director, Genesee Valley Trust Company,* 2008-December 31, 2011
Director and Past President, Canandaigua Country Club

Caroline C. Shipley

Director, Canandaigua National Corporation, 1984-present
Treasurer and Council Member, First Congregational Church
Board of Managers, Ontario Children's Foundation
Canandaigua City School District Audit Committee–retired June 2017
Canandaigua City School District Board of Education
- Member, 1979-2009
- President, 1983-1991 and 2007-2009

Financial Manager, Dell Broadcasting, WCGR/WLKA, 1985-1991
Treasurer and Financial Manager, Sonnenberg Gardens, 1973-1984

Sue S. Stewart, Esq.

Director, Canandaigua National Corporation, 2000-present
Attorney, retired
Senior Vice President and General Counsel, University of Rochester, 2003-2012
Nixon Peabody LLP
- Partner, 1978-2001
- Managing Partner, Rochester Office, 1998-2000

Former Director, United Way of Greater Rochester
Co-chair of Board of Trustees and Audit Committee Member, National Center for Education and the Economy
Director and Audit Committee Member, John L. Wehle Sr. Foundation

Alan J. Stone

Canandaigua National Corporation
- Director, 1986-present
- Chairman of the Board, 1994-2004

Managing Member, Stone Family Properties LLC, 1986-present
Member, City Mini Storage LLC, 1999-present
Stone Construction Equipment, Inc.
- Director, 1969-2009
- Co-founder and CEO, 1969-1986

Volunteer, Rochester Museum and Science Center and Cumming Nature Center

Emeritus Board Members

James S. Fralick

Officers

George W. Hamlin, IV, Esq.	*Chairman*
Daniel P. Fuller	*Vice Chairman*
Frank H. Hamlin, III, Esq.	*President and Chief Executive Officer*
Lawrence A. Heilbronner-Kolthoff	*Treasurer, Executive Vice President, and Chief Financial Officer*
Jennifer N. Weidner, Esq.	*Secretary, Senior Vice President, and General Counsel*

* Wholly owned subsidiary of Canandaigua National Corporation
** Wholly owned subsidiary of Canandaigua National Bank & Trust Company
***Majority-owned subsidiary of Canandaigua National Corporation

Officers

Office of the President

George W. Hamlin, IV, Chairman, Officer, Senior Policy Advisor, and Consultant at Large
Frank H. Hamlin, III, Esq., President and Chief Executive Officer
Jennifer N. Weidner, Esq., Senior Vice President – General Counsel
Rita Nischal, Esq., Vice President – Corporate Counsel

Corporate Risk Operations

A. Rosamond Zatyko, Executive Vice President – Chief Administrative Officer
Vicki B. Mandrino, CRCM, Senior Vice President – Chief Compliance Officer
Stephen R. Livingston, Vice President – Fiduciary Compliance Officer
JoAnn K. Roberts, CTFA, CFIRS™, Vice President – Fiduciary Compliance Officer
Cori A. Zinter, AMLCA, CAMS, CRCM, CFCS, CFE, Vice President – Bank Compliance Officer

Linda M. Schnitzler, CRP®, CFE, CFSA®, Senior Vice President – Chief Risk Officer
Deborah A. Cragg, CISSP®, PMP®, ITIL®v3, Senior Vice President – Chief Information Security Officer
Jason A. Ingalls, CCBSO, Vice President – Security Officer
Linda J. Shannon, CAMS, CFE, Vice President – BSA/AML Compliance Officer
Kathleen A. Housel, CFE, CBAP®, Assistant Vice President – Fraud Risk Officer
Greig W. Holman, CRVPM® II, ABCP, Banking Officer – Vendor Management/Business Continuity Program Manager
Tina L. Jones, ACAMS, Banking Officer – Electronic Banking Risk Officer

Charleen H. Cordaro, Senior Vice President – Chief Credit Risk Officer
Julie A. Gunkler, Vice President – Senior Portfolio Credit Risk Manager
Jodi L. Houlihan, Vice President – Credit Administration Manager
Susan E. Davis, Assistant Vice President – Collateral Control Manager
Sarah E. Housel, Assistant Vice President– Credit Review Manager
Thomas M. Rogers, Assistant Vice President – Risk Rating Model Manager/Senior Commercial Loan Reviewer
Matthew M. Fowler, Banking Officer – Appraisal Review Manager
Kevin H. Roat, Banking Officer – Credit Analyst

Michelle A. LaMachia, CFSA®, CFIRS™, Senior Vice President – Chief Auditor
Nancy J. Stockdale, CPA, CRMA®, Vice President – Audit Manager
Jamie Lynn Vitticore Jensen, AAP, Banking Officer – Senior Auditor
Darrell E. Jolley, CPA, Banking Officer – Senior Auditor

Consumer Lending

Brian E. Pasley, Executive Vice President – Consumer Lending and CRA Officer
Brenda W. Stoker, Senior Vice President – Consumer Lending Operations Manager
Lori R. Ellis, Vice President – Senior Consumer Underwriter/Dealer Services Officer
Cheryl A. Hurd, Vice President – Senior Consumer Underwriter
Kathleen E. Roos, Banking Officer – Consumer Lending Operations Team Leader
Elaine N. Zukaitis, Banking Officer – Home Equity Specialist

Wealth Management

Salvatore (Sam) Guerrieri Jr., Executive Vice President – Wealth Brands
Geoffrey E. Blyth, Senior Vice President – Senior Investment Strategist
Laurie A. Haelen, AIF®, Senior Vice President – Manager of Wealth Solutions
Joy R. Plotnik, Esq., Senior Vice President – Wealth Premium Solutions
Stephen A. Rossi, CFP®, CFA®, Senior Vice President – Senior Equity Strategist
James P. Terwilliger, PhD, CFP®, Senior Vice President – Senior Planning Advisor
Scott B. Trumbower, Senior Vice President – Manager of Wealth Administration and Shareholder Relations
Brian J. Murphy, CIMA, Vice President – Senior Research Analyst
Roberta L. Van Winkle, Vice President – Private Banker

Mark Buonaugurio, Senior Vice President – Senior Wealth Advisor and Team Leader
Jason W. Fitzgerald, CFP®, Senior Vice President – Senior Wealth Advisor and Team Leader
Thomas W. Benner, CFP®, Vice President – Wealth Advisor
Nancy E. Bowes, CFP®, Vice President – Wealth Advisor
Maria E. Caton, CFP®, ChSNC®, AAMS®, Vice President – Wealth Advisor
Donna L. Cator, CFP®, CDFA, Vice President – Wealth Advisor
James M. Exton, Vice President – Wealth Advisor
David P. Guzzetta, AFIM™, CMFC®, Vice President – Wealth Advisor
Denise A. Kelly-Dohse, CFP®, Vice President – Wealth Advisor
Stephen C. Krauss, CFA, Vice President – Wealth Advisor
Adam R. Leszyk, CFP®, Vice President – Wealth Advisor
Michael D. Schiller, CFP®, Vice President – Wealth Advisor

Jillian E. Dart, Esq., CTFA, Senior Vice President – Senior Trust Officer and Team Leader
James F. Lieb, CTFA, Senior Vice President – Senior Trust Officer and Group Manager
Catherine D. Noble, CTFA, Senior Vice President – Trust Officer
Amy K. Boyd Ertel, Esq., CTFA, Vice President – Trust Officer
Ramona Green, CTFA, Vice President – Trust Officer
Laura A. King, Vice President – Trust Officer
Kevin D. Kinney, CTFA, Vice President – Trust Officer
Louis B. Rossetti, Vice President – Trust Officer
Kirsten S. Johnson, Banking Officer – Trust Officer
Rebecca M. Leusch, Banking Officer – Trust Officer

David W. Gibbons, CRPC, Senior Vice President – Program Manager
Margaret W. Whelehan, Vice President – Financial Advisor
Theodore J. Chamberlain, Assistant Vice President – Financial Advisor
Charles G. Cox, Assistant Vice President – Financial Advisor
Jeffrey G. Humbert, Assistant Vice President – Financial Advisor
Jerry W. Lack, CLTC®, Assistant Vice President – Financial Advisor

Officers, cont.

Kurt E. Rosen, Senior Vice President – Wealth Business Manager
Mark S. Mazzochetti, CISP, Vice President – Retirement Services Officer
Gregory S. Pilato, Vice President – Retirement Consultant
M. Beth Uhlen, CPA, Vice President – Wealth Operations Manager
Catherine M. Burnett, Banking Officer – Wealth Operations Assistant Manager
Charlene S. Johnson, CPC, QPA, QKA, QPFC, TGPC, ERPA, Banking Officer – Retirement Services Officer

Commercial Services

Gary L. Babbitt, Executive Vice President – Chief Lending Officer
Jeffrey W. Barker, Senior Vice President – Group Manager, Commercial Services
Bernard E. Belcher, Vice President – Commercial Services Officer/ Business Banking Portfolio Officer
Ann M. Lyon, Assistant Vice President – Resource Recovery Officer
Marc J. Ferenchak, Banking Officer – Resource Recovery Officer
Lindsay R. Tiballi, Banking Officer – Commercial Services Officer/ Business Banking Portfolio Officer

Brendon S. Crossing, Senior Vice President – Commercial Services Officer
Christine A. Eichelberger, Senior Vice President – Group Manager, Commercial Services
Michael S. Mallaber, Senior Vice President – Group Manager, Commercial Services
Charles J. Vita, Senior Vice President – Group Manager, Commercial Services
Darrin Brentnall, Vice President – Commercial Services Officer
Jason A. DeWitt, Vice President – Commercial Services Officer
Kevin A DiGiacomo, Vice President – Commercial Services Officer
John C. Eilertsen Jr., Vice President – Commercial Services Officer
Eric W. Koehler, Vice President – Commercial Services Officer
Jason P. Tonkery, Vice President – Commercial Services Officer
Kevin M. Galka, Assistant Vice President – Commercial Services Officer

Susan C. DiProjetto, Senior Vice President – Business Banking Sales Manager
Mary Anne Burkhart, Vice President – Business Banking Officer
Michael J. O'Donnell, Vice President – Business Banking Officer
James D. Schrader, Vice President – Business Banking Officer
Lindsay Mohr, Assistant Vice President – Business Banking Officer

Retail Banking

Karen C. Serinis, Executive Vice President – Retail Banking
Kathy C. Amberge, Senior Vice President – Group Manager, Retail Banking
Gwendolen A. Crawford, Senior Vice President – Group Manager, Retail Banking
Christopher M. Keys, Senior Vice President – Group Manager, Retail Banking
Glenn R. Colliss, Vice President – Electronic Banking Product Manager
Manuela H. Eckert, Vice President – Deposit Product Manager
Patricia L. Pape, Vice President – Call Center Manager
Christine E. Ensslin, Assistant Vice President – Retail Operations Officer
Jan C. Schrader, Assistant Vice President – Help Desk Manager

Corporate Communications and Marketing

Karen C. Serinis, Executive Vice President – Retail Banking
Stephen R. Martin, Senior Vice President – Director of Corporate Communications
Lindsay A. Morrow, Vice President – Corporate Communications & New Media Manager

Tamra A. B. O'Donnell, Senior Vice President – Director of Corporate Marketing
Denise E. Hildreth, Assistant Vice President – Traditional Marketing Manager
Peter Horvath, Assistant Vice President – Market Insights Manager
Kelly M. Sheridan, Assistant Vice President – Electronic/Web Marketing Manager

Finance and Operations

Lawrence A. Heilbronner-Kolthoff, Executive Vice President – Chief Financial Officer/Operations
Mary Kay Bashaw, Senior Vice President – Treasurer
Dawn C. Priolo, Senior Vice President – Director of Finance
Vincent K. Yacuzzo, Vice President – Controller
Robert L. Simpson, Assistant Vice President – Financial Reporting Officer
Dana I. Mayeu, Assistant Vice President – Assistant Controller

Barbara A. Finch, Senior Vice President – Director of Operations
Daniel P. Linehan, Vice President – Banking Operations Manager
Brett Elliott, Banking Officer – Facilities Supervisor

Information Technology and Project Management Office

Annette Joyce, Executive Vice President – Information Technology and Project Management
Joe Kovacs, Senior Vice President – PMO Director and Senior IT Project Manager
Michael A. Mandrino, Senior Vice President – Chief Technology Officer
Sandra U. Roberts, Senior Vice President – Chief Information Officer
J. Brian Nolan, Vice President – IT Director, Business Applications
Andrew J. Shafer, Vice President – IT Director, Infrastructure and Security

Human Resources

Michelle L. Pedzich, Senior Vice President – Director of Human Resources
Marie E. Dastin, Senior Vice President – Manager of Human Resources and Development
Shelley V. Tierson, Vice President – Benefits and Compensation Manager

Canandaigua National Corporation

Canandaigua National Trust Company of Florida
George W. Hamlin, IV, Chairman of the Board
Frank H. Hamlin, III, Director, President, and Chief Executive Officer
Salvatore (Sam) Guerrieri Jr., Executive Vice President – Wealth Brands
Lawrence A. Heilbronner-Kolthoff, CPA, Executive Vice President and Chief Financial Officer
Mary Kay Bashaw, Senior Vice President – Treasurer
Geoffrey E. Blyth, Senior Vice President – Senior Investment Strategist
Mark Buonaugurio, Senior Vice President – Senior Wealth Advisor
Jason W. Fitzgerald, CFP®, Senior Vice President – Senior Wealth Advisor
Laurie A. Haelen, AIF®, Senior Vice President – Wealth Solutions
James F. Lieb, CTFA, Senior Vice President – Senior Trust Officer
Stephen R. Martin, Senior Vice President – Director of Corporate Communications
Catherine D. Noble, CTFA, Senior Vice President – Trust Officer
Joy R. Plotnik, Esq., Senior Vice President – Wealth Premium Solutions
Dawn C. Priolo, Senior Vice President – Director of Finance
Kurt E. Rosen, Senior Vice President – Wealth Business Manager
Stephen A. Rossi, CFP®, CFA®, Senior Vice President – Senior Equity Strategist
James P. Terwilliger, PhD, CFP®, Senior Vice President – Senior Planning Advisor
Scott B. Trumbower, Senior Vice President – Wealth Administration and Shareholder Relations
Jennifer N. Weidner, Esq., Senior Vice President – General Counsel
Nancy E. Bowes, CFP®, Vice President – Wealth Advisor
Amy K. Boyd Ertel, Esq., CTFA, Vice President – Trust Officer
Noleen R. Burch, Vice President – Wealth Associate
Maria E. Caton, CFP®, ChSNC®, AAMS®, Vice President – Wealth Advisor
Donna L. Cator, CFP®, CDFA, Vice President – Wealth Advisor
Suzanne Ellin, JD, CPA, CGMA, CTFA, CFP®, Vice President – Trust Officer
Ramona Green, CTFA, Vice President – Trust Officer
David P. Guzzetta, AFIM™, CMFC®, Vice President – Wealth Advisor
Adam R. Leszyk, CFP®, Vice President – Wealth Advisor
Stephen R. Livingston, Vice President – Fiduciary Compliance Officer
Mark S. Mazzochetti, CISP, Vice President – Retirement Services Officer
Lindsay A. Morrow, Vice President – Corporate Communications and New Media Manager
Rita Nischal, Esq., Vice President – Corporate Counsel
JoAnn K. Roberts, CTFA, CFIRS™, Vice President – Fiduciary Compliance Officer
Linda J. Shannon, CAMS, CFE, Vice President – BSA/AML Compliance Officer
Paul S. Tarantino, Vice President – Senior Wealth Consultant
M. Beth Uhlen, CPA, Vice President – Wealth Operations Manager
Vincent K. Yacuzzo, Vice President – Controller
Catherine M. Burnett, Banking Officer – Wealth Operations Assistant Manager
Charlene S. Johnson, CPC, QPA, QKA, QPFC, TGPC, ERPA, Banking Officer – Retirement Services Officer
Daniel R. Goodwin, Director
Garth C. Harding, Director, Vice Chairman, and Secretary
Sue A. Jacobson, Director
Christine L. Jennings, Director
Nelle Miller, Director
Magdiel (Mike) Rosario, Director
Bernice W. Skirboll, Director
Janice A. Zarro, Director
Alan M. Lupton, Director Emeritus

Richard C. McCarthy, Director Emeritus
Stephen Natapow, Director Emeritus

CNB Insurance Agency
Frank H. Hamlin, III, Esq., President and Chief Executive Officer
Lawrence A. Heilbronner-Kolthoff, CPA, Director, Treasurer, Executive Vice President, and Chief Financial Officer
Jennifer N. Weidner, Esq., Director, Secretary, and Senior Vice President
Salvatore (Sam) Guerrieri Jr., Director and Executive Vice President
David W. Gibbons, Insurance Officer, Senior Vice President – Program Manager
Margaret W. Whelehan, Insurance Officer, Vice President – Financial Advisor
Jerry W. Lack, CLTC®, Insurance Officer, Assistant Vice President – Financial Advisor

Home Town Funding, Inc., d/b/a CNB Mortgage Company
Frank H. Hamlin, III, Esq., Director and Chief Executive Officer
Brian E. Pasley, Chairman of the Board and Executive Vice President
Lawrence A. Heilbronner-Kolthoff, CPA, Director, Treasurer, Executive Vice President, and Chief Financial Officer
Gary L. Babbitt, Director, Secretary, and Executive Vice President
Salvatore (Sam) Guerrieri Jr., Director and Executive Vice President
Karen C. Serinis, Director and Executive Vice President
George W. Hamlin, IV, Director
Christopher R. Spaker, President
Helen M. Saxby, Senior Vice President – Mortgage Operations and Compliance Manager
Dana Lazenby, Vice President – Lock Desk Specialist/Pricing Analyst/ Closing Manager
Kelly R. Crane, Assistant Vice President – Mortgage Processing Supervisor

WBI OBS Financial, LLC
Frank H. Hamlin, III, Esq., Manager and Chief Executive Officer
Lawrence A. Heilbronner-Kolthoff, CPA, Chairman, Manager, and Recording Secretary
Salvatore (Sam) Guerrieri Jr., Manager

OBS Holdings, Inc.
John Henry, Director, President, and Chief Executive Officer
Lawrence A. Heilbronner-Kolthoff, CPA, Chairman of the Board
Frank H. Hamlin, III, Esq., Director
Salvatore (Sam) Guerrieri Jr., Director
Catherine Farley, Chief Operating Officer

Community Banking Offices

Bloomfield
Judy A. Reader, Assistant Vice President, Community Office Manager
Kim Brewer, Community Office Assistant Manager

Brighton
Iva Doser, Vice President, Community Office Manager
Matthew Alexander, Community Office Assistant Manager

Canandaigua–Lakeshore
Kimberly A. Sorel, Assistant Vice President, Community Office Manager
Christopher Harvey, Community Office Assistant Manager

Canandaigua–Main Office
Deborah Rought, Vice President, Community Office Manager
Joshua Maxwell, Community Office Assistant Manager

Chili
Suzanne M. Wedgwood, Assistant Vice President, Community Office Manager

Customer Service Center
Patricia Pape, Vice President, Customer Service Center Manager
Adelina Santiago, Customer Service Center Assistant Manager

Farmington
Mark D. Allman, Assistant Vice President, Community Office Manager
Kelly Cochrane, Community Office Assistant Manager

Greece Latta & Long Pond
Zo Ann Soong, Assistant Vice President, Community Office Manager
Donna Kretchmer, Community Office Assistant Manager

Greece Ridge
Cristi Alvarado, Assistant Vice President, Community Office Manager
Alana Shary, Community Office Assistant Manager

Henrietta
Carol Love, Assistant Vice President, Community Office Manager
Danyelle Kirchgessner, Community Office Assistant Manager

Honeoye
Sandra L. D'Angelo, Assistant Vice President, Community Office Manager
Amy L. Force, Bank Officer, Community Office Assistant Manager

Honeoye Falls
Steven R. Benz, Vice President, Community Office Manager
Melissa DeSain, Bank Officer, Community Office Assistant Manager

Irondequoit
Gail Bellucco, Assistant Vice President, Community Office Manager
Andrea Gillette, Community Office Assistant Manager

Manchester-Shortsville
Amy Flaitz, Assistant Vice President, Community Office Manager
Amy E. Eagley, Community Office Assistant Manager

Mendon
Michelle Hill, Assistant Vice President, Community Office Manager
Emma Netto, Community Office Assistant Manager

Penfield
Harry Gibbs, Bank Officer, Community Office Manager
Amity Decker, Community Office Assistant Manager

Perinton
Christopher Pedrone, Assistant Vice President, Community Office Manager
Kristen Littlefield, Community Office Assistant Manager

Pittsford
Barbara J. Karley, Vice President, Community Office Manager
Barbara Knickerbocker, Community Office Assistant Manager

Rochester Alexander Park
Selvia Hanna, Assistant Vice President, Community Office Manager
Tharushan Thavakumar, Community Office Assistant Manager

Rochester College Town
Javier Quintana, Assistant Vice President, Community Office Manager
Rayon Boxx, Community Office Assistant Manager

Rochester East Main
Louis P. Nau, Vice President, Community Office Manager
Jessica Young Carbonel, Community Office Assistant Manager

Victor
Samantha A. Johnson, Vice President, Community Office Manager
Edward Reed, Community Office Assistant Manager

Webster BayTowne
Alicia Welch, Bank Officer, Community Office Manager
Demet Guler, Community Office Assistant Manager

Webster Jackson-Ridge
Joseph Maggio, Vice President, Community Office Manager
Shawn Hall, Community Office Assistant Manager

Community Advisory Committees

Bloomfield Office
George Braddon, III
Sandra S. Jackson
Frank J. Marianacci
Kyle T. Marianacci
Judy A. Reader*

Brighton Office
Iva Doser*
Peggy Growney
James D. Ryan Jr.

Canandaigua/Lakeshore Offices
David S. Brassie, CPA
Edward (Russ) C. Kenyon, Esq.
Frank S. Macri
Kenneth (JR) B. Miller
Deborah E. Rought*
Kimberly A. Sorel*

Chili Office
Salvatore (Sam) A. Campanella
Dr. Steven M. Ess
Dr. Piush Sharma
Suzanne M. Wedgwood*

Farmington Office
Mark D. Allman*
Ronald L. Brand
Anne P. Fessler, DVM
Leonard P. Muscarella, DDS

Greece Ridge Office
Cristi Alvarado*
Barbara Giancursio

Greece Latta & Long Pond Office
William E. Selke
ZoAnn Soong*

Henrietta Office
Scott Adair
Bill Jones
Carol M. Love*

Honeoye Office
Sandra D'Angelo*
Michael P. Dougherty
Robert D. Helling
Kristine A. Singer

Honeoye Falls Office
Steven R. Benz*
John T. Harris
Joseph Notar
Barry I. Shapiro
Mark A. Stephens

Irondequoit Office
Gail Bellucco*
Arnold J. Eckert
Jack R. Herrema

Manchester-Shortsville Office
Amy Flaitz*
Rosanna Foster

Mendon Office
Irene Bennett
William P. Fletcher
Michelle Hill*

Penfield Office
Harry Gibbs*
Andrew R. Randisi

Perinton Office
Thomas C. Beck
T. C. Lewis
Christopher A. Pedrone*

Pittsford Office
John E. Bernacki
Pamela J. Gratzer
Barbara J. Karley*
Robert E. Wells

Rochester Alexander Park Office
Margaret A. Eidman
Selvia Hanna*
Peter S. Mohr
William G. Shaheen

Rochester College Town Office
Patricia J. Bean
Jamie Bishop
Javier Quintana*
Stephanie E. Von Bacho

Rochester East Main Office
Andrew A. Costanza
Donald E. Jeffries
Jennifer R. Jones, CPA
Louis P. Nau*

Victor Office
Donald J. Culeton
Samantha A. Johnson*

Webster BayTowne Office
Adam Brozowitz
Alicia Welch*
William K. White

Webster Jackson-Ridge Office
Elena M. Bernardi
Joseph Maggio*

*Community Office Manager

Wealth Board of Advisors
Amanda Carden Agins, Esq.
Richard C. Fox
A. Thomas Hildebrandt
Ken McCurdy
James D. Ryan Jr.
Mark R. Siewert
Patricia Ward-Baker
Keith M. Wilson

THE ARTHUR S. HAMLIN AWARD FOR EXCELLENCE

CONGRATULATIONS TO THIS YEAR'S RECIPIENT, DANA MAYEU.

Every year, the Bank recognizes the outstanding contribution of one of its own with the Arthur S. Hamlin Award. Employees are encouraged to nominate one of their peers who has demonstrated exceptional performance and dedication to the Bank.

"I was extremely honored to be nominated for this award. I struggle to find the appropriate words to properly express the immense feeling of gratitude to the many that were instrumental in bestowing upon me the honor of receiving the Arthur S. Hamlin Award for Excellence. Canandaigua National Bank & Trust is like a second family to me, and to many others. The culture, and what we stand and strive for, is truly one of a kind and sets us apart from all other organizations. CNB is an organization that truly cares about its employees and the communities it serves. I look forward to this award driving me to further better myself as a person and a teammate."

***–Dana Mayeu,** 2017 Arthur S. Hamlin Award Recipient*

2018 NOMINEES

Cristi Alvarado
Leslie Alvarado
Maria Caton
Kelly Cochrane
Charles Cox
Kelly Crane
Kayla Domville
Tracie Evans
Linda Green
Dan Hayes
Laura King
Ann Lyon
Kelly Masline
Karen Maxfield
Brian Nolan
Amanda Parsons
Lori Phillips
Kathy Roos
Susanne Scrooby
Diana Wright
Jessica Young Carbonel

PAST RECIPIENTS

Shannon Nemitz 2016
Gehrig Lohrmann 2015
Rebecca Long 2014
Lauren Kolb 2013
Kathy Amberge 2012
Brendon Crossing 2011
Darlene Rogers 2011
Lori R. Ellis 2010
Kathleen A. Housel 2009
Chris Keys 2008
Barbara Finch 2007
Jim Terwilliger 2006
Brenda Whitney 2006
Vicki Mandrino 2005
Michael Mandrino 2004
Tamra O'Donnell 2004
Lisa Blakesley 2003
Jason Ingalls 2002
Brenda Stoker 2001
Lena Hayes 2000
Dawn Phelps 1999
M. Beth Uhlen 1998
Kathy Lafler 1997
Jeannie Blance 1996
Amy Eagley 1995
Regina Kesel 1995
Susan Foose 1994
Kathleen Corry 1993
James Roth 1992
Michael O'Donnell 1991
Jerry Drake 1990
Linda Keyes 1989

CNB CELEBRATES SUCCESS

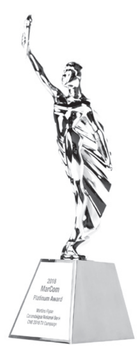
In 2018, for the second year in a row, CNB was honored with multiple awards from local publications—all in recognition of outstanding customer service.

In August, the *Rochester Business Journal/The Daily Record* Reader Rankings announced CNB as a winner in the "Best Wealth Management" and "Best Mortgage Lender" categories, and top three (3) in the "Best Business Banking" and "Best Overall Company to Work For (501-1,000 Employees)" categories.

In its second year, *Messenger Post Media* "Best of the Finger Lakes" reader rankings released its award winners in October. CNB was voted best in the "Bank and Services" and "Wealth Management" categories.

In November, the *Democrat & Chronicle* Rochester's Choice Awards named CNB as the "Silver Choice" winner in the "Bank/Trust Company" and "Mortgage Lender" categories.

We would like to thank everyone who voted and supported us for each of the awards we were honored with in 2018! We are proud to be a part of the communities we serve, and look forward to continuing our relationships in each—because seeing our customers succeed is the greatest reward.

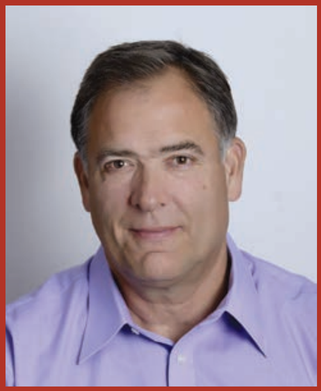


Additionally, CNB was honored with the 2018 MarCom Platinum Award for our 2018 TV Ad Campaign—a series of three commercials that featured Business Banking, Wealth Management, and Mobile Banking technologies. MarCom Awards is an international creative competition that recognizes outstanding achievement by marketing and communication professionals.

Notes

“Teamwork, discipline, and unwavering dedication to serving our customers and community have guided us well in an economic environment that has brought down giants.”

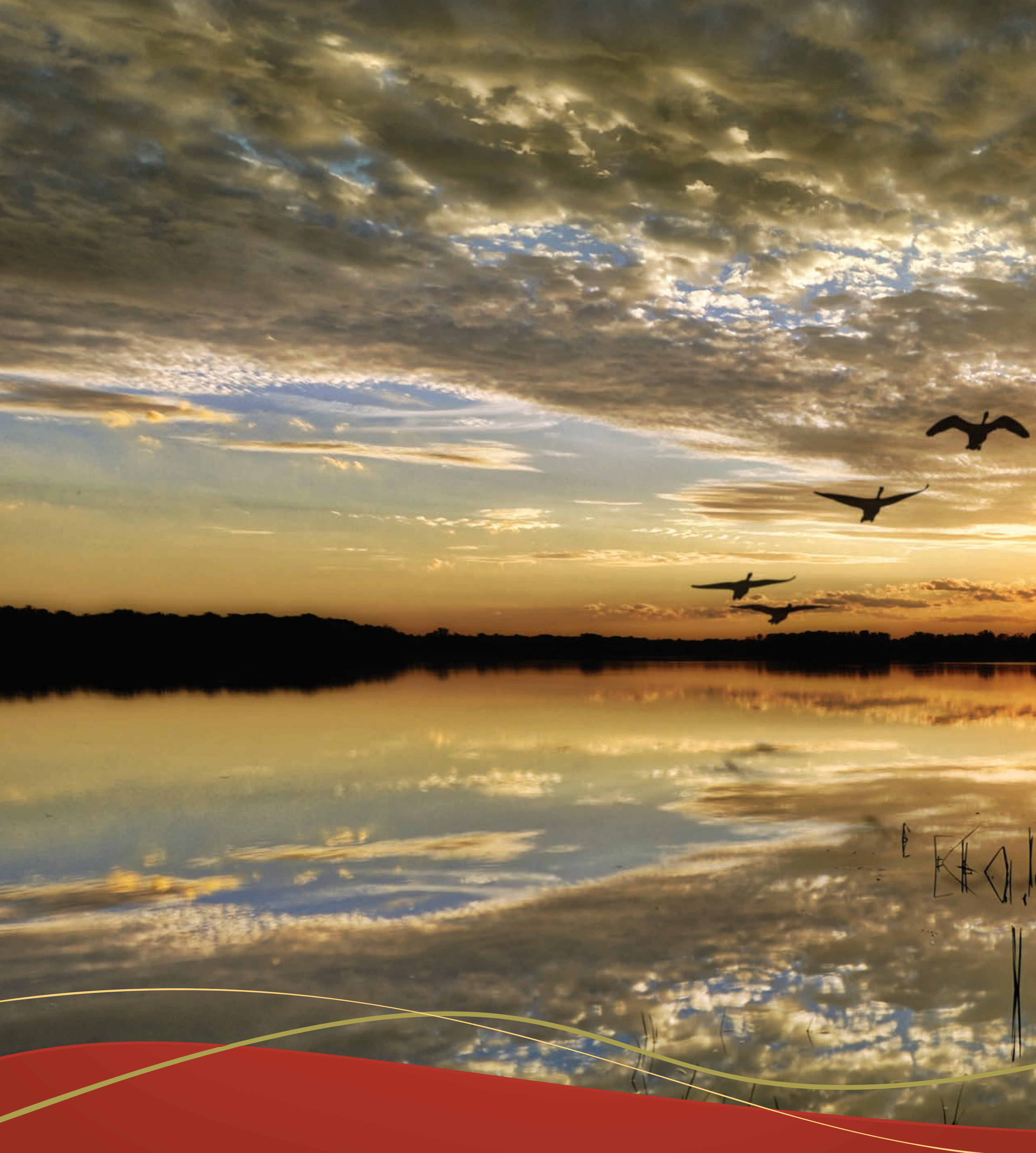
— Frank H. Hamlin, III, President and CEO



About the Photographer

Jim Montanus is a local photographer with a passion for capturing the beauty of our region’s many natural wonders. He was born in Rochester, and grew up in northwest Greece. As the son of legendary Kodak photographer Neil Montanus, Jim has been around photography his entire life—but it wasn’t until his college years at Brockport that he developed a keen interest in fine art photography, landscapes, fine portraiture, and more. Today, his professional work includes commercial, editorial, portrait, and architectural photography. He also teaches photography classes and sells fine art photos out of his gallery in Rochester.

MF CNB-17925/02-19



Canandaigua
National
Corporation