Cass Information Systems, Inc.®

2021 Annual Report and Form 10-K

Dear Fellow Shareholders,

A Letter from Chairman and CEO Eric Brunngraber and President and COO Martin Resch

It was with great enthusiasm that Cass entered 2021, ready to put the challenges of 2020 behind us, and we are glad to report our excitement proved to be warranted.

Financially, we achieved a great many results we can be proud of, including the following:

- An overall increase in revenue of 6.3% despite the lingering impact of a historically low interest rate environment
- An increase in net income of 13.6% due to revenue improvement as well as efforts to constrain expense growth
- An increase in diluted earnings per share of 15.6%
- Maintained exceptional credit quality with no charge-offs during 2021 or nonperforming assets at the end of 2021
- Repurchased $31.0 million of our common stock and increased our dividend, reflecting our solid financial performance, strong capital base, and the board's continued optimism about our long-term prospects.

We have continued to execute on our leadership succession plan. Martin Resch has been promoted to president in addition to his current role as chief operating officer. Martin will continue to implement strategic initiatives with respect to our invoice payment and information services business while taking a broader role over human resources, technology and Cass Commercial Bank. In addition, Teresa Meares joined us as vice president and general manager of our waste and sustainability management business. Teresa will look to identify new industry partnership opportunities, expand product and service offerings, increase financial interchange, and drive revenue growth in this critical market for Cass. Teresa's entrepreneurial spirit and leadership qualities are a perfect fit for this role.

The Board, as part of its ongoing refreshment and succession planning process, appointed a new member, Wendy Henry. Wendy retired from BKD, LLP in June 2021 as managing partner of the St. Louis office. Wendy's experience with complex financial and accounting issues, leadership in diversity, equity and inclusion planning combined with her financial statement expertise and a passion for serving non-profit institutions via board and committee involvement makes her an ideal fit on our board.

We are also very proud to publish our first annual Environmental, Social, and Governance (ESG) report. This ESG report celebrates our proud 115-year culture and beliefs which support our ongoing ESG efforts. Our goal is to constantly improve the way we interact with our community and the environment as we create greater value through our actions as a business.

Looking forward into 2022, we will continue to execute on our corporate strategy, which, among other things, includes improving our operational efficiency via continued investment into optical character recognition (OCR), automated intelligence, machine learning and other processes to consume images and produce data. Additionally, we constantly invest to enhance our ability to service our clients by improving our rating engine capabilities, accelerating our client onboarding processes and building out our international presence to support our global client base. Lastly, we see the increasing probability of a rise in interest rates as a potential lift to our revenue given our strategic decision to keep an asset-sensitive balance sheet. An increase in our net interest margin would be a significant positive driver to our revenue and profitability.

We feel humbled that we have been allowed to participate in the success of our clients through the turbulent past few years. We have been able to support our customers, and the significant increase in their volumes, with a mostly remote workforce, protecting both our customers and our employees during the global pandemic. Our ability to accept highly diverse inputs spanning paper, digitized documents, digital data, and data feeds in multiple formats and to turn those unstructured inputs into structured and actionable information, to support both financial transactions and audit functions, has helped our clients to maintain cost control and improve data quality. We support client/vendor relationships, inserting highly qualified business experts and industry specialists into the conversation. As a trusted third party, validating pricing and contractual agreements, we are recognized by the high level of service we provide, while processing millions of transactions and billions of dollars accurately, on time, and in a cost effective, safe, and secure manner. Cass Commercial Bank, our FDIC-insured and federally-regulated banking subsidiary, provides payment and financing solutions in conjunction with these services.

We continue to see excellent growth potential in our existing markets, through both the addition of new clients and the development of new and innovative products and services. We also continue to explore new markets, both commercially and geographically, where we believe our clients can benefit from our involvement.

As always, we are excited to direct you to the Investor section of our website. Here you will find our SEC filings, an investor presentation containing highlights of our recent accomplishments, the initiatives we are currently undertaking, and our vision for the future, along with our new ESG report, as previously mentioned.

On behalf of the Board of Directors and our leadership team, we wish to thank you for your support and belief in the future success of Cass. We are proud and thankful to work with the outstanding and dedicated Cass team, as well as participating in the success of our growing roster of clients. We remain grateful for all of God's blessings, inspiration, and guidance.

Sincerely,

Eric H. Brunngraber
Chairman and Chief Executive Officer
Cass Information Systems, Inc.

Martin H. Resch
President and Chief Operating Officer
Cass Information Systems, Inc.

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

FORM 10-K

(Mark One)

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2021

☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from _______ to _______

Commission file number 000-20827

CASS INFORMATION SYSTEMS, INC.

(Exact name of registrant as specified in its charter)

Missouri	43-1265338
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

12444 Powerscourt Drive, Suite 550, St. Louis, Missouri		(314) 506-5500
(Address of principal executive offices)	(Zip Code)	(Telephone Number, incl. area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value $0.50 per share	CASS	The Nasdaq Global Select Market

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

Title of each Class
None

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

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

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes ☒ No ☐

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

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

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act).

Yes ☐ No ☒

The aggregate market value of the common stock held by non-affiliates of the Registrant was approximately $543,951,000 based on the closing price of the common stock of $40.75 on June 30, 2021, as reported by The Nasdaq Global Select Market. As of February 15, 2022, the Registrant had 13,694,489 shares outstanding of common stock.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required for Part III of this report is incorporated by reference to the Registrant's Proxy Statement for the 2022 Annual Meeting of Shareholders.

Auditor Name: KPMG LLP Auditor Location: St. Louis, MO Auditor Firm ID: 185

CASS INFORMATION SYSTEMS, INC.
FORM 10-K ANNUAL REPORT
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Forward-looking Statements - Factors That May Affect Future Results

This report may contain or incorporate by reference forward-looking statements made pursuant to the safe harbor provisions of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Although we believe that, in making any such statements, our expectations are based on reasonable assumptions, forward-looking statements are not guarantees of future performance and involve risks, uncertainties, and other factors beyond our control, which may cause future performance to be materially different from expected performance summarized in the forward-looking statements. These risks, uncertainties and other factors are discussed in the section Part I, Item 1A, "Risk Factors." We undertake no obligation to publicly update or revise any forward-looking statements to reflect changed assumptions, the occurrence of anticipated or unanticipated events, or changes to future results over time.

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PART I.

ITEM 1. BUSINESS

Description of Business

Cass Information Systems, Inc. ("Cass" or the "Company") provides payment and information processing services to large manufacturing, distribution and retail enterprises across the United States. The Company's services include freight invoice rating, payment processing, auditing, and the generation of accounting and transportation information. Cass also processes and pays facility-related invoices, which include electricity and gas as well as waste and telecommunications expenses, and is a provider of telecom expense management solutions. Cass solutions include integrated payments, a B2B payment platform for clients that require an agile fintech partner. Additionally, the Company offers an on-line platform to provide generosity services for faith-based and non-profit organizations. The Company's bank subsidiary, Cass Commercial Bank (the "Bank"), supports the Company's payment operations. The Bank also provides banking services to its target markets, which include privately-owned businesses and faith-based ministries in the St. Louis metropolitan area as well as other selected cities in the United States.

Company Strategy and Core Competencies

Cass is an information services company with a primary focus on processing payables and payables-related transactions for large corporations located in the United States. Cass possesses four core competencies that encompass most of its processing services.

Data acquisition – This refers to the gathering of data elements from diverse, heterogeneous sources and the building of complete databases for our customers. Data is the raw material of the information economy. Cass gathers vital data from complex and diverse input documents, electronic media, proprietary databases and data feeds, including data acquired from vendor invoices as well as customer procurement and sales systems. Through its numerous methods of obtaining streams and pieces of raw data, Cass is able to assemble vital data into centralized data management systems and warehouses, thus producing an engine to create the power of information for managing critical corporate functions and processing systems.

Data management – Once data is assembled, Cass is able to utilize the power from derived information to produce significant savings and benefits for its clients. This information is integrated into customers' unique financial and accounting systems, eliminating the need for internal accounting processing and providing internal and external support for these critical systems. Information is also used to produce management and exception reporting for operational control, feedback, planning assistance and performance measurement.

Business Intelligence – Receiving information in the right place at the right time and in the required format is paramount for business survival. Cass' information delivery solutions provide reports, digital images, data files and retrieval capabilities through the internet or directly into customer internal systems. Cass' proprietary internet management delivery system is the foundation for driving these critical functions. Transaction, operational, control, status and processing exception information are all delivered through this system creating an efficient, accessible and highly reliable asset for Cass customers.

Financial exchange – Since Cass is unique among its competition in that it owns a commercial bank, it is also able to manage the movement of funds from its customers to their suppliers. This is a distinguishing factor, which clearly requires the processing capability, operating systems and financial integrity of a banking organization. Cass provides immediate, accurate, controlled and protected funds management and transfer system capabilities for all of its customers. Old and costly check processing and delivery mechanisms are replaced with more efficient electronic cash management and funds transfer systems.

Cass' core competencies allow it to perform the highest volumes of transaction processing in an integrated, efficient and systematic approach. Not only is Cass able to process the transaction, it is also able to collect the data defining the transaction and effect the financial payment governing its terms.

These core competencies, enhanced through shared business processes, drive Cass' strategic business units. Building upon these foundations, Cass continues to explore new business opportunities that leverage these competencies and processes.

Marketing, Customers and Competition

The Company, through its Transportation Information Services business unit, is one of the largest firms in the transportation bill processing and payment industry in the United States based on the total dollars of transportation bills paid and items processed. Competition consists of a few primary competitors and numerous small transportation bill audit firms located throughout the United States. While offering transportation payment services, few of these audit firms compete on a national basis. These competitors compete mainly on price, functionality and service levels. The Company, through its Expense Management business unit, also competes with other companies located throughout the United States that pay energy and waste bills and provide management reporting. Available data indicates that the Company is one of the largest providers of energy information processing and payment services. Cass is unique among these competitors in that it is not exclusively affiliated with any one energy service provider ("ESP"). Various ESPs market the Company's services, adding value with their unique auditing, consulting and technological capabilities. Many of Cass' services are customized for the ESPs, providing a full-featured solution without any development costs to the ESP. The Company, through its Telecom Information Services business unit, is a leader in the growing telecom expense management market and competes with other companies located throughout the United States in this market. The Company, through its Waste Expense Management business competes against small expense management companies along with large national account programs of major haulers. The Company division known as Gyve Generosity Services uses an on-line platform to provide generosity services for faith-based and non-profit organizations, which is a complementary service offering to the Bank's faith-based customers. Also, the Company through its Integrated Payments business competes with providers of corporate payment solutions.

The Bank is organized as a Missouri trust company with banking powers and was founded in 1906. The Company was originally classified as a bank holding corporation due to its ownership of a federally-insured commercial bank and was originally organized in 1982 as Cass Commercial Corporation under the laws of Missouri. Approval by the Board of Governors of the Federal Reserve System was received in February 1983. The Company changed its name to Cass Information Systems, Inc. in January 2001. In December 2011, the Federal Reserve Bank ("FRB") of St. Louis approved the election of Cass Information Systems, Inc. to become a financial holding company. As a financial holding company, Cass may engage in activities that are financial in nature or incidental to a financial activity. The Bank encounters competition from numerous banks and financial institutions located throughout the St. Louis, Missouri metropolitan area and other areas in which the Bank competes. The Bank's principal competitors, however, are large bank holding companies that are able to offer a wide range of banking and related services through extensive branch networks. The Bank targets its services to privately held businesses located in the St. Louis, Missouri area and faith-based ministries located in St. Louis, Missouri and other selected cities located throughout the United States.

The Company holds several trademarks for the payment and rating services it provides. These include: FreightPay®, Transdata®, Ratemaker®, Best Rate®, Rate Exchange®, CassPort®, Cass Freight Index®, Cass Truckload Linehaul Index®, Cass Intermodal Price Index® Expense$mart®, ExpenseSmart®, WasteVision™ and Direct2Carrier Payments™. The Company holds patents for methods and systems for managing employee-liable expenses and methods and systems for communicating expense management information.

The Company and its subsidiaries have a varied client base and are not dependent on any one customer or group of customers for a significant portion of its business.

Employees and Human Capital Resources

The Company and its subsidiaries had 884 full-time and 232 part-time employees as of February 15, 2022. Of these employees, the Bank had 65 full-time and no part-time employees.

Cass has long been committed to comprehensive and competitive compensation and benefits programs to attract and retain talent in a competitive environment. Retention of skilled and highly trained employees is critical as the Company's future operating results depend substantially upon the continued service of executive officers and key personnel. Furthering the philosophy to attract and retain a pool of talented and motivated employees who will continue to advance the Company's purpose and contribute to overall success, compensation and benefits programs include: a noncontributory profit sharing program for most employees; a defined contribution 401(k) plan to provide retirement benefits to eligible employees; a performance-based equity compensation program for executive officers and key personnel; and incentive programs for loan and sales personnel. Cass also provides comprehensive health, dental, and vision plans to most employees, as well as free employee assistance programs to all employees and members of their families.

The Company invests in employees' future by assisting with tuition reimbursement for continued education throughout the Company's employee ranks. Employees are also able to participate in educational seminars run by outside parties to maintain and expand professional knowledge.

In order to develop a workforce that aligns with the Company's corporate values, regularly sponsored campaigns and events occur, such as charitable workplace campaigns, food drives to assist local food banks, and toy drives to support charities during the holidays. Additionally, the Company supports a number of organizations with annual financial contributions.

Cass strives to place the health and well-being of employees above all else. Never has this been more necessary than during the novel coronavirus ("COVID-19") pandemic. In response to the COVID-19 pandemic, the Company has taken significant steps to protect the health and well-being of employees and clients. These steps include implementing a work-from-home policy for the majority of employees and establishing safety guidelines in facilities based on guidance from the U.S. Centers for Disease Control and Prevention ("CDC").

The Company recognizes the benefits of building a corporate culture that promotes diversity, equity and inclusion ("DEI") to foster unique ideas and ways of thinking. In pursuit of the Company's overall DEI mission, Cass focuses on: a) cultivating an environment that encourages collaboration, flexibility and fairness to enable all employees to contribute to their full potential; b) promoting diversity in our talent management and succession planning processes and employee development programs; and c) ensuring leadership commitment in facilitating the Company's DEI efforts.

Supervision and Regulation

The Company and its bank subsidiary are extensively regulated under federal and state law. These laws and regulations are intended to primarily protect depositors, not shareholders. The Bank is subject to regulation and supervision by the Missouri Division of Finance, the FRB and the Federal Deposit Insurance Corporation (the "FDIC"). The Company is a financial holding company within the meaning of the Bank Holding Company Act of 1956, as amended (the "BHC Act"), and as such, it is subject to regulation, supervision and examination by the FRB. Significant elements of the laws and regulations applicable to the Company and the Bank are described below. The description is qualified in its entirety by reference to the full text of the statutes, regulations and policies that are described. Also, such statutes, regulations and policies are continually under review by Congress and state legislatures and federal and state regulatory agencies. A change in statutes, regulations or regulatory policies applicable to the Company and its subsidiaries could have a material effect on the business, financial condition and results of operations of the Company.

Bank Holding Company Activities – In general, the BHC Act limits the business of bank holding companies to banking, managing or controlling banks and other related activities. In addition, bank holding companies that qualify and elect to be financial holding companies, such as the Company, may engage in any activity, or acquire and retain the shares of a company engaged in any activity, that is either (i) financial in nature or incidental to such financial activity or (ii) complementary to a financial activity and does not pose a substantial risk to the safety and soundness of depository institutions or the financial system generally. Such permitted activities include securities underwriting and dealing, insurance underwriting and making merchant banking investments.

To maintain financial holding company status, a financial holding company and all of its depository institution subsidiaries must be "well capitalized" and "well managed." A depository institution subsidiary is considered to be "well capitalized" if it satisfies the requirements for this status discussed in the section "Prompt Corrective Action" below. A depository institution subsidiary is considered "well managed" if it received a composite rating and management rating of at least "satisfactory" in its most recent examination. A financial holding company's status will also depend upon it maintaining its status as "well capitalized" and "well managed' under applicable FRB regulations. If a financial holding company ceases to meet these capital and management requirements, the FRB may impose limitations or conditions on the conduct of its activities during the non-compliance period, and the company may not commence any of the broader financial activities permissible for financial holding companies or acquire a company engaged in such financial activities without prior approval of the FRB. If the company does not return to compliance within 180 days, the FRB may require divestiture of the holding company's depository institutions.

In order for a financial holding company to commence any new activity permitted by the BHC Act or to acquire a company engaged in any new activity permitted by the BHC Act, each insured depository institution subsidiary of the financial holding company must have received a rating of at least "satisfactory" in its most recent examination under the Community Reinvestment Act. See "Community Reinvestment Act" below.

The FRB has the power to order any bank holding company or its subsidiaries to terminate any activity or to terminate its ownership or control of any subsidiary when the FRB has reasonable grounds to believe that continuation of such activity or such ownership or control constitutes a serious risk to the financial soundness, safety or stability of any bank subsidiary of the bank holding company.

The BHC Act, the Bank Merger Act, and other federal and state statutes regulate acquisitions of banks and banking companies. The BHC Act requires the prior approval of the FRB for the direct or indirect acquisition by the Company of more than 5% of the voting shares or substantially all of the assets of a bank or bank holding company. Under the Bank Merger Act, the prior approval of the FRB or other appropriate bank regulatory authority is required for the Bank to merge with another bank or purchase the assets or assume the deposits of another bank. In reviewing acquisition applications, the bank regulatory authorities will consider, among other things, the competitive effect and public benefits of the transactions, the capital position of the combined organization, the risks to the stability of the U.S. banking or financial system, the applicant's performance record under the Community Reinvestment Act and its compliance with fair housing laws.

The Dodd-Frank Act – The Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act"), enacted in July 2010, significantly restructured the financial regulatory environment in the United States, affecting all bank holding companies and banks, including the Company and the Bank, some of which are described in more detail below. The impact of the Dodd-Frank Act on the Company and the Bank has been substantial.

Dividends and Stock Repurchases – Both the Company and the Bank are subject to various regulations that restrict their ability to pay dividends and the amount of dividends that they may pay. Under the Federal Deposit Insurance Corporation Improvement Act of 1991, a depository institution, such as the Bank, may not pay dividends if payment would cause it to become undercapitalized or if it is already undercapitalized. The payment of dividends by the Company and the Bank may also be affected or limited by other factors, such as the requirement to maintain adequate capital and, under certain circumstances, the ability of federal regulators to prohibit dividend payments as an unsound or unsafe practice.

In July 2019, the federal bank regulators adopted final rules (the "Capital Simplifications Rules") applicable to banks, like Cass, that are not subject to the advanced approaches capital framework that applies to large, internationally active banking organizations with at least $250 billion in total consolidated assets or at least $10 billion in total on-balance sheet foreign exposure. Among other things, the Capital Simplifications Rules eliminated the standalone Federal Reserve prior approval requirement in the Basel III Capital Rules for any repurchase of common stock. In certain circumstances, the Company's repurchases of its common stock may be subject to a prior approval or notice requirement under other regulations, policies or supervisory expectations of the Federal Reserve Board.

Capital Requirements – As a bank holding company, the Company and the Bank are subject to capital requirements pursuant to the FRB's capital guidelines which include (i) risk-based capital guidelines, which are designed to make capital requirements more sensitive to various risk profiles and account for off-balance sheet exposure; (ii) guidelines that consider market risk, which is the risk of loss due to change in value of assets and liabilities due to changes in interest rates; and (iii) guidelines that use a leverage ratio which places a constraint on the maximum degree of risk to which a financial holding company may leverage its equity capital base.

The Basel III Capital Rules require the Company and the Bank to maintain the following:

- a minimum ratio of common equity Tier 1 capital to risk-weighted assets of at least 4.5%, plus a 2.5% capital conservation buffer (resulting in a minimum common equity Tier 1 capital ration of 7.0%);
- a minimum ratio of Tier 1 capital to risk-weighted assets of at least 6.0%, plus a 2.5% capital conservation buffer (resulting in a minimum Tier 1 capital ratio of 8.5%);
- a minimum ratio of total capital (that is, Tier 1 plus Tier 2 capital) to risk-weighted assets of at least 8.0%, plus the 2.5% capital conservation buffer (resulting in a minimum total capital ratio of 10.5%); and
- a minimum leverage ratio of 4.0%, calculated as the ratio of Tier 1 capital to adjusted average consolidated assets.

The capital conservation buffer is designed to absorb losses during periods of economic stress. Banking institutions with a ratio of common equity Tier 1 capital to risk-weighted assets above the minimum but below the conservation buffer will face limitations on the payment of dividends, common stock repurchases and discretionary cash payments to executive officers based on the amount of the shortfall.

Common equity Tier 1 capital is generally defined as common stockholders' equity and retained earnings. Tier 1 capital is generally defined as common equity Tier 1 and Additional Tier 1 capital. Additional Tier 1 capital generally includes certain noncumulative perpetual preferred stock and related surplus and minority interests in equity accounts of consolidated subsidiaries. Total capital includes Tier 1 capital (common equity Tier 1 capital plus Additional Tier 1 capital) and Tier 2 capital. Tier 2 capital is comprised of capital instruments and related surplus meeting specified requirements. Also included in Tier 2 capital is the allowance for credit losses limited to a maximum of 1.25% of risk-weighted assets and, for non-advanced approaches institutions like Cass that have exercised a one-time opt-out election regarding the treatment of Accumulated Other Comprehensive Income ("AOCI"), up to 45% of net unrealized gains on available-for-sale equity securities with readily determinable fair market values. The calculation of all types of regulatory capital is subject to deductions and adjustments specified in applicable regulations.

The calculation of all types of regulatory capital is subject to deductions and adjustments specified in the regulations. For instance, the Basel III Capital Rules and the Capital Simplification Rules provide for a number of deductions from and adjustments to common equity Tier 1 capital. These include, for example, the requirement that certain deferred tax assets and significant investments in non-consolidated financial entities be deducted from Tier 1 capital to the extent that any one such category exceeds 25% of common equity Tier 1 capital.

In determining the amount of risk-weighted assets for purposes of calculating risk-based capital ratios, all assets, including certain off-balance sheet assets, are multiplied by a risk weight factor assigned by the regulations based on the risks believed inherent in the type of asset. Higher levels of capital are required for asset categories believed to present greater risk. For example, a risk weight of 0% is assigned to cash and U.S. government securities, a risk weight of 50% is generally assigned to prudently underwritten first lien one to four-family residential mortgages, a risk weight of 100% is assigned to commercial and consumer loans, a risk weight of 150% is assigned to certain past due loans, and a risk weight of between 0% to 600% is assigned to permissible equity interests, depending on certain specified factors.

In February 2019, the federal bank regulatory agencies issued a final rule (the "2019 CECL Rule") that revised certain capital regulations to account for changes to credit loss accounting under U.S. GAAP. The 2019 CECL Rule included a transition option that allows banking organizations to phase in, over a three-year period, the day-one adverse effects of adopting a new accounting standard related to the measurement of current expected credit losses ("CECL") on their regulatory capital ratios (three-year transition option). In March 2020, the federal bank regulatory agencies issued an interim final rule that maintains the three-year transition option of the 2019 CECL Rule and also provides banking organizations that were required under U.S. GAAP (as of January 2020) to implement CECL before the end of 2020 the option to delay for two years an estimate of the effect of CECL on regulatory capital, relative to the incurred loss methodology's effect on regulatory capital, followed by a three-year transition period (five-year transition option). The Company elected to not use either the three-year or five-year transition period.

The FRB has authority to establish individual minimum capital requirements in appropriate cases upon a determination that an institution's capital level is or may become inadequate in light of the particular risks or circumstances. As of December 31, 2021, the Company and the Bank met all capital adequacy requirements under the Basel III Capital Rules.

In December 2017, the Basel Committee published standards that it described as the finalization of the Basel III post-crisis regulatory reforms (commonly referred to as "Basel IV"). Among other things, these standards revise the Basel Committee's standardized approach for credit risk (including by recalibrating risk weights and introducing new capital requirements for certain "unconditionally cancellable commitments," such as unused credit card lines of credit) and provides a new standardized approach for operational risk capital. Under the Basel framework, these standards are currently set to go into effect on January 1, 2023, pushed back 12 months from the original implementation date of January 1, 2022 as a result of the Covid-19 pandemic, with an aggregate output floor phasing in through January 1, 2027. Under the current U.S. capital rules, operational risk capital requirements and a capital floor apply only to advanced approaches institutions, and not to the Company or the Bank. The impact of Basel IV on the Company will depend on the manner in which it is implemented by the federal bank regulators.

Source of Strength Doctrine – FRB and other regulations require bank holding companies to act as a source of financial and managerial strength to their subsidiary banks. Under this requirement, the Company is expected to commit resources to support the Bank. Any capital loans by a bank holding company to any of its subsidiary banks are subordinate in right of payment to depositors and to certain other indebtedness of such subsidiary banks. In the event of a bank holding company's bankruptcy, any commitment by the bank holding company to a federal bank regulatory agency to maintain the capital of a subsidiary bank will be assumed by the bankruptcy trustee and entitled to priority of payment.

Deposit Insurance – Substantially all of the deposits of the Bank are insured up to applicable limits by the Deposit Insurance Fund ("DIF") of the FDIC, and the Bank is subject to deposit insurance assessments to maintain the DIF. Deposit insurance assessments are based on average consolidated total assets minus average tangible equity. Under the FDIC's risk-based assessment system, insured institutions with less than $10 billion in assets, such as the Bank, are assigned to one of four risk categories based on supervisory evaluations, regulatory capital level, and certain other factors, with less risky institutions paying lower assessments. An institution's assessment rate depends upon the category to which it is assigned and certain other factors.

FDIC insurance expense totaled $300,200, $152,500 and $108,700 for the years ended December 31, 2021, 2020 and 2019, respectively.

The FDIC may terminate deposit insurance upon a finding that the institution has engaged in unsafe and unsound practices, is in an unsafe or unsound condition to continue operations, or has violated any applicable law, regulation, rule, order or condition imposed by the FDIC.

Prompt Corrective Action – The Basel III Capital Rules incorporate new requirements into the prompt correction action framework, described above. The Federal Deposit Insurance Act ("FDIA") requires that federal banking agencies take "prompt corrective action" against depository institutions that do not meet minimum capital requirements and includes the following five capital tiers: "well-capitalized," "adequately capitalized," "undercapitalized," "significantly undercapitalized" and "critically undercapitalized." A depository institution's capital tier will depend upon how its capital levels compare with various relevant capital measures and certain other factors, as established by regulation.

A depository institution is deemed to be (i) "well-capitalized" if the institution has a total risk-based capital ratio of 10% or greater, a Tier 1 risk-based capital ratio of 8% or greater, a leverage ratio of 5% or greater, a common equity Tier 1 ratio of 6.5% or greater and is not subject to any regulatory order agreement or written directive to meet and maintain a specific capital level for any capital measure; (ii) "adequately capitalized" if the institution has a total risk-based capital ratio of 8% or greater, a Tier 1 risk-based capital ratio of 6% or greater, a leverage ratio of 4% or greater, a common equity Tier 1 ratio of 4.5% or greater and does not meet the definition of "well capitalized"; (iii) "undercapitalized" if the institution has a total risk-based capital ratio that is less than 8%, a Tier 1 risk-based capital ratio of less than 6%, a leverage ratio of less than 4% or a common equity Tier 1 ratio of less than 4.5%; (iv) "significantly undercapitalized" if the institution has a total risk-based capital ratio of less than 6%, a Tier 1 risk-based capital ratio of less than 4%, a leverage ratio of less than 3% or a common equity Tier 1 ratio of less than 3%; and (v) "critically undercapitalized" if the institution has a ratio of tangible equity (as defined in the regulations) to total assets that is equal to or less than 2%. An institution may be deemed to be in a capital category that is lower than indicated by its capital ratios if it is determined to be in an unsafe or unsound condition or if it receives an unsatisfactory examination rating with respect to certain matters. A bank's capital category is determined solely for the purpose of applying prompt corrective action regulations, and the capital category may not constitute an accurate representation of the bank's overall financial condition or prospects for other purposes.

Subject to a narrow exception, a receiver or conservator is required to be appointed for an institution that is "critically undercapitalized" within specified time frames. The regulations also provide that a capital restoration plan must be filed with the FRB within 45 days of the date an institution is deemed to have received notice that it is "undercapitalized," "significantly undercapitalized" or "critically undercapitalized." Compliance with the plan must be guaranteed by any parent holding company up to the lesser of 5% of the institution's total assets when it was deemed to be undercapitalized or the amount necessary to achieve compliance with applicable capital requirements. In addition, numerous mandatory supervisory actions become immediately applicable to an undercapitalized institution including, but not limited to, increased monitoring by regulators and restrictions on growth, capital distributions and expansion. The FRB could also take any one of a number of discretionary supervisory actions, including the issuance of a capital directive and the replacement of senior executive officers and directors. Significantly and critically undercapitalized institutions are subject to additional mandatory and discretionary measures.

As of December 31, 2021, the most recent notification from the regulatory agencies categorized the Company and the Bank as well-capitalized. For further information regarding the capital ratios and leverage ratio of the Company and the Bank, see Item 8, Note 2 of this report.

Safety and Soundness Regulations – In accordance with the FDIA, the federal banking agencies adopted guidelines establishing general standards relating to internal controls, information systems, internal audit systems, loan documentation, credit underwriting, interest rate risk exposure, asset growth, asset quality, earnings, compensation, fees and benefits. In general, the guidelines require that institutions maintain appropriate systems and practices to identify and manage the risks and exposures specified in the guidelines. The guidelines prohibit excessive compensation as an unsafe and unsound practice and describe compensation as excessive when the amounts paid are unreasonable or disproportionate to the services performed by an executive officer, employee, director or principal shareholder. In addition, regulations adopted by the federal banking agencies authorize the agencies to require that an institution that has been given notice that it is not satisfying any of such safety and soundness standards to submit a compliance plan. If the institution fails to submit an acceptable compliance plan or fails in any material respect to implement an accepted compliance plan, the agency must issue an order directing corrective actions and may issue an order directing other actions of the types to which an undercapitalized institution is subject under the "prompt corrective action" provisions of FDIA. If the institution fails to comply with such an order, the agency may seek to enforce such order in judicial proceedings and to impose civil money penalties.

Loans-to-One-Borrower – The Bank generally may not make loans or extend credit to a single or related group of borrowers in excess of 15% of unimpaired capital and surplus. An additional amount may be loaned, up to 10% of unimpaired capital and surplus, if the loan is secured by readily marketable collateral, which generally does not include real estate. As of December 31, 2021, the Bank was in compliance with the loans-to-one-borrower limitations.

Depositor Preference – The FDIA provides that, in the event of the "liquidation or other resolution" of an insured depository institution, the claims of depositors of the institution, including the claims of the FDIC as subrogee of insured depositors, and certain claims for administrative expenses of the FDIC as a receiver, will have priority over other general unsecured claims against the institution. If an insured depository institution fails, insured and uninsured depositors, along with the FDIC, will have priority in payment ahead of unsecured, non-deposit creditors, including depositors whose deposits are payable only outside of the United States and the parent bank holding company, with respect to any extensions of credit they have made to such insured depository institution.

Community Reinvestment Act – The Community Reinvestment Act of 1977 ("CRA") requires depository institutions to assist in meeting the credit needs of their market areas consistent with safe and sound banking practice. Under the CRA, each depository institution is required to help meet the credit needs of its market areas by, among other things, providing credit to low- and moderate-income individuals and communities. Depository institutions are periodically examined for compliance with the CRA and are assigned ratings that must be publicly disclosed. In order for a financial holding company to commence any new activity permitted by the BHC Act, or to acquire any company engaged in any new activity permitted by the BHC Act, each insured depository institution subsidiary of the financial holding company must have received a rating of at least "satisfactory" in its most recent examination under the CRA. The Bank received a rating of "satisfactory" in its most recent CRA exam.

In December 2019, the FDIC joined the Office of the Comptroller of the Currency in proposing rules that would significantly change existing CRA regulations. The proposed rules are intended to increase bank activity in low and moderate income communities where there is significant need for credit, more responsible lending, greater access to banking services, and improvements to critical infrastructure. The proposals focus on four improvement areas: (i) clarifying what activities qualify for CRA credit; (ii) updating assessment areas where activities count for CRA credit; (iii) providing a more objective method for measuring CRA performance; and (iv) improving the timeliness and transparency of record keeping and reporting. The Federal Reserve did not join in the proposed rulemaking but is seeking public comment on an approach to modernize the CRA and evaluate how banks address inequities in credit access. The agencies are working together to put forward a joint rule. The Company will continue to monitor CRA regulatory changes and evaluate any resulting impact on the Company's financial condition and results of operations.

Financial Privacy – Banks and other financial institutions are subject to regulations that limit their ability to disclose non-public information about consumers to nonaffiliated third parties. These limitations require disclosure of privacy policies to consumers and affect how consumer information is transmitted through diversified financial companies and conveyed to outside vendors.

The Bank is also subject to regulatory guidelines establishing standards for safeguarding customer information and maintaining information security programs. The standards set forth in the guidelines are intended to ensure the security and confidentiality of customer records and information, protect against any anticipated threats or hazards to the security or integrity of such records and protect against unauthorized access to or use of such records or information that could result in substantial harm or inconvenience to any customer.

Transactions with Affiliates – Transactions between the Bank and its affiliates are subject to regulations that limit the types and amounts of covered transactions engaged in by the Bank and generally require those transactions to be on an arm's-length basis. The term "affiliate" is defined to mean any company that controls or is under common control with the Bank and includes the Company and its non-bank subsidiaries. "Covered transactions" include a loan or extension of credit, as well as a purchase of securities issued by an affiliate, certain purchases of assets from the affiliate, certain derivative transactions that create a credit exposure to an affiliate, the acceptance of securities issued by the affiliate as collateral for a loan, and the issuance of a guarantee, acceptance or letter of credit on behalf of an affiliate. In general, these regulations require that any such transaction by the Bank (or its subsidiaries) with an affiliate must be secured by designated amounts of specified collateral and must be limited to certain thresholds on an individual and aggregate basis.

Federal law also limits the Bank's authority to extend credit to its directors, executive officers and 10% shareholders, as well as to entities controlled by such persons. Among other things, extensions of credit to insiders are required to be made on terms that are substantially the same as, and follow credit underwriting procedures that are not less stringent than those prevailing for comparable transactions with unaffiliated persons. Also, the terms of such extensions of credit may not involve more than the normal risk of repayment or present other unfavorable features and may not exceed certain limitations on the amount of credit extended to such persons, individually and in the aggregate, which limits are based, in part, on the amount of the Bank's capital.

Cybersecurity – In March 2015, federal regulators issued two related statements regarding cybersecurity. One statement indicates that financial institutions should design multiple layers of security controls to establish lines of defense and to ensure that their risk management processes address the risk posed by compromised customer credentials, including security measures to reliably authenticate customers accessing internet-based services of the financial institution. The other statement indicates that a financial institution's management is expected to maintain sufficient business continuity planning processes to ensure the rapid recovery, resumption and maintenance of the institution's operations after a cyber-attack involving destructive malware. A financial institution is expected to develop appropriate processes to enable recovery of data and business operations and address rebuilding network capabilities and restoring data if the institution or its critical service providers fall victim to this type of cyber-attack. If the Company fails to observe the regulatory guidance, it could be subject to various regulatory sanctions, including financial penalties.

In November 2021, the federal banking agencies adopted a final rule requiring banking organizations to notify their primary banking regulator within 36 hours of determining that a "computer-security incident" has materially disrupted or degraded, or is reasonably likely to materially disrupt or degrade, the banking organization's ability to carry out banking operations or deliver banking products and services to a material portion of its customer base, its businesses and operations that would result in material loss, or its operations that would impact the stability of the United States. Banking organizations are also required to notify each affected customer as soon as possible in the event of an incident that results in actual or potential harm to the integrity or availability of information and systems or that violates or threatens to violate the organization's security for four or more hours.

In the ordinary course of business, the Company relies on electronic communications and information systems to conduct operations and store sensitive data. The Company employs an in-depth, layered, defensive approach that leverages people, processes and technology to manage and maintain cybersecurity controls. The Company also employs a variety of preventative and detective tools to identify, protect, detect, respond, and recover against suspicious activity, as well as to report on any suspected advanced persistent threats. Notwithstanding the strength of the Company's defensive measures, the threat from cyber attacks is severe, attacks are sophisticated and increasing in volume, and attackers respond rapidly to changes in defensive measures. While the Company has not experienced a significant compromise to date, significant data loss or any material financial losses related to cybersecurity attacks, the Company's systems and those of its customers and third-party service providers are under constant threat and it is possible that the Company could experience a significant event in the future. Risks and exposures related to cybersecurity attacks are expected to remain high for the foreseeable future due to the rapidly evolving nature and sophistication of these threats, as well as due to the expanding use of internet banking, mobile banking and other technology-based products and services by the Company and its customers. See Item 1A, "Risk Factors" for a further discussion of risks related to cybersecurity.

Other Regulations – The operations of the Company and the Bank are also subject to:

- Truth-In-Lending Act, governing disclosures of credit terms to consumer borrowers;
- Fair Credit Reporting Act, governing the provision of consumer information to credit reporting agencies and the use of consumer information;
- Fair Debt Collection Act, governing the manner in which consumer debts may be collected by collection agencies;
- Electronic Funds Transfer Act, governing automatic deposits to and withdrawals from deposit accounts and customers' rights and liabilities arising from the use of automated teller machines and other electronic banking services.
- Real Estate Settlement Procedures Act, requiring that borrowers for mortgage loans for one- to four-family residential real estate receive various disclosures, including good faith estimates of settlement costs, lender servicing and escrow account practices, and prohibiting certain practices that increase the cost of settlement services;
- Equal Credit Opportunity Act, prohibiting discrimination on the basis of race, creed or other prohibited factors in extending credit;
- Check Clearing for the 21st Century Act (also known as "Check 21"), which gives "substitute checks," such as digital check images and copies made from that image, the same legal standing as the original paper check;
- The USA PATRIOT Act, which requires banks and savings institutions to establish broadened anti-money laundering compliance programs and due diligence policies and controls to ensure the detection and reporting of money laundering; and
- The Bank Secrecy Act, which requires U.S. financial institutions to collaborate with the U.S. government in cases of suspected money laundering and fraud.

Certain of these laws are consumer protection laws that extensively govern the Company's relationship with its customers. Violations of applicable consumer protection laws can result in significant potential liability from litigation brought by customers, including actual damages, restitution and attorneys' fees. Federal bank regulators, state attorneys general and state and local consumer protection agencies may also seek to enforce consumer protection requirements and obtain these and other remedies, including regulatory sanctions, customer rescission rights, action by the state and local attorneys general in each jurisdiction in which the Company operates and civil money penalties. Failure to comply with consumer protection requirements may also result in the Company's inability to pursue merger or acquisition transactions.

Website Availability of SEC Reports

Cass files annual, quarterly and current reports with the Securities and Exchange Commission (the "SEC"). Cass will, as soon as reasonably practicable after they are electronically filed with or furnished to the SEC, make available free of charge on its website each of its Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, all amendments to those reports, and its definitive proxy statements. The address of Cass' website is: www.cassinfo.com.

The reference to the Company's website address does not constitute incorporation by reference of the information contained on the website and should not be considered part of this report.

Statistical Disclosure by Bank Holding Companies

For the statistical disclosure by bank holding companies, refer to Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

ITEM 1A. RISK FACTORS

This section highlights specific risks that could affect the Company's business. Although this section attempts to highlight key factors, please be aware that other risks may prove to be important in the future. New risks may emerge at any time, and Cass cannot predict such risks or estimate the extent to which they may affect the Company's financial performance. In addition to the factors discussed elsewhere or incorporated by reference in this report, the identified risks that could cause actual results to differ materially include the following:

Economic and Market Conditions Risk

The COVID-19 pandemic creates significant risks and uncertainties for the Company's business and results of operations.

In March 2020, the World Health Organization ("WHO") declared COVID-19 as a global pandemic. The COVID-19 pandemic has negatively impacted the global economy, disrupted global supply chains and manufacturing, lowered interest rates, and created significant volatility and disruption in financial markets. In addition, the pandemic has resulted in temporary closures of many businesses and the institution of social distancing and sheltering in place requirements in many states and communities, including those in major markets in the Bank is located or does business. In late fiscal 2020, vaccines for combating COVID-19 were approved by health agencies and have been administered throughout the country. While vaccination efforts are ongoing and a significant amount of previous business and other restrictions have been lifted, the ongoing impact of COVID-19, including any increases in infection rates, new variants, supply chain disruptions, labor force shortages, and renewed governmental actions and business and activity restrictions to combat its spread, cannot be estimated. Given these and other uncertainties discussed throughout this report, the Company remains subject to heightened risk, and the aggregate impact that COVID-19 could have on the Company's financial condition and operating results is presently unknown.

As a result, demand for the Company's products and services has been, and could continue to be, significantly impacted. Demand for payment and information processing services by manufacturing, distribution, and retail enterprises, and loans and other products and services that the Company and the Bank offer and on which success the Company relies to drive growth, is highly dependent upon the business environment in the primary markets in which the Company operates and in the United States as a whole. Business closures could cause decreased volumes in the Company's payment and information processing services due to the decline in customers' business activity.

Furthermore, the pandemic could influence the recognition of credit losses in the Company's loan and lease portfolios and increase its allowance for credit losses, as both businesses and consumers are negatively impacted by the economic downturn.

In addition, in an effort to boost consumer spending due to the pandemic, the Federal Reserve has taken action to lower the Federal Funds rate, which has adversely affected, and could continue to adversely affect, interest income and therefore, the Company's results of operations and financial condition. Also, pandemic related disruptions in labor markets and global supply chains have led to the emergence of high inflation which, if persistent, could increase expense via increased compensation and other costs.

The Company's business operations may also be disrupted if significant portions of its workforce are unable to work effectively, because of quarantines, illness, government actions, or other restrictions in connection with the pandemic, travel restrictions, technology limitations and/or disruptions, including remote working measures and their attendant cybersecurity risks. Furthermore, the business operations of the Company and the Bank may be disrupted due to vendors and third-party service providers being unable to work or provide services effectively, because of quarantines, illness, government actions, or other restrictions in connection with the pandemic.

The extent to which the COVID-19 pandemic impacts the Company's business, results of operations, and financial condition, as well as its regulatory capital and liquidity ratios, will depend on future developments, which are highly uncertain, including the scope and duration of the pandemic and any future actions taken by governmental authorities and other third parties in response to the pandemic. Moreover, the effects of the COVID-19 pandemic may heighten many of the other risks described in this Item 1A, "Risk Factors" section, including, but not limited to, risks of credit deterioration, interest rate changes, governmental actions, market volatility, security breaches and technology interruptions.

Vaccine mandates could hinder Cass' ability to attract and retain employees.

Vaccine mandates and other governmental requirements related to the ongoing COVID-19 pandemic could have an adverse impact on the Company's business financial condition and results of operations as they could negatively impact the Company's ability to attract and retain employees, increase expenses, and pose operational issues with respect to testing requirements.

General political, economic or industry conditions may be less favorable than expected.

Local, domestic, and international economic, political and industry-specific conditions and governmental monetary and fiscal policies affect the industries in which the Company competes, directly and indirectly. Conditions such as inflation, recession, unemployment, volatile interest rates, tight money supply, real estate values, international conflicts and other factors outside of Cass' control may adversely affect the Company. Economic downturns could result in the delinquency of outstanding loans, which could have a material adverse impact on Cass' earnings.

Unfavorable developments concerning customer credit quality could affect Cass' financial results.

Although the Company regularly reviews credit exposure related to its customers and various industry sectors in which it has business relationships, default risk may arise from events or circumstances that are difficult to detect or foresee. Under such circumstances, the Company could experience an increase in the level of provision for credit losses, delinquencies, nonperforming assets, net charge-offs and allowance for credit losses.

In certain circumstances, Cass remits payment of invoices prior to receiving funds from its customers. As such, Cass could experience losses if such funds are not received from customers after payment is remitted.

Although the Company regularly reviews credit exposure related to its customers and various industry sectors in which it has business relationships, default risk may arise from events or circumstances that are difficult to detect or foresee. Under such circumstances, the Company could experience losses related to funds remitted for payment to freight carriers, utility companies and other such companies, prior to receiving funds from its customers.

The Company has lending concentrations, including, but not limited to, faith-based ministries located in selected cities, franchise restaurants, and privately-held businesses located in or near St. Louis, Missouri, that could suffer a significant decline which could adversely affect the Company.

Cass' customer base consists, in part, of lending concentrations in several segments and geographical areas. If any of these segments or areas is significantly affected by weak economic conditions, the Company could experience increased credit losses, and its business could be adversely affected.

Fluctuations in interest rates could affect Cass' net interest income and balance sheet.

The operations of financial institutions such as the Company are dependent to a large degree on net interest income, which is the difference between interest income from loans and investments and interest expense on deposits and borrowings. Prevailing economic conditions, the fiscal and monetary policies of the federal government and the policies of various regulatory agencies all affect market rates of interest, which in turn significantly affect financial institutions' net interest income. Fluctuations in interest rates affect Cass' financial statements, as they do for all financial institutions. Volatility in interest rates can also result in disintermediation, which is the flow of funds away from financial institutions into direct investments, such as federal government and corporate securities and other investment vehicles, which, because of the absence of federal insurance premiums and reserve requirements, generally pay higher rates of return than financial institutions. As discussed in greater detail in Item 7A, "Quantitative and Qualitative Disclosures about Market Risk," a low level of interest rates would have a negative impact on the Company's net interest income.

The Company may be adversely impacted by the replacement of LIBOR as a reference rate.

LIBOR and certain other interest rate benchmarks are the subject of recent national, international and other regulatory guidance and proposals for reform. These reforms may cause such benchmarks to perform differently than in the past or have other consequences which cannot be predicted. LIBOR in its current form was anticipated to no longer be available after 2021.

On November 30, 2020 the administrator of LIBOR announced it will consult on its intention to cease publication of the one-week and two-month settings immediately following the LIBOR publication on December 31, 2021, and the remaining U.S. dollar LIBOR settings immediately following the LIBOR publication on June 30, 2023. While there is no consensus on what rate or rates may become accepted alternatives to LIBOR, a group of market participants convened by the FRB, the Alternative Reference Rates Committee, has selected the SOFR as its recommended alternative to U.S. dollar LIBOR.

The U.S. federal banking agencies issued a statement in November 2020 encouraging banks to transition away from U.S. dollar LIBOR as soon as practicable and to stop entering into new contracts that use U.S. dollar LIBOR by December 31, 2021. SOFR or other alternative reference rates may perform differently than LIBOR in response to changing market conditions. For example, SOFR could experience greater decreases during times of economic stress, which could require the Company to lend at lower rates at times when the Company's borrowing costs are increasing.

While the Company does not currently originate loans tied to LIBOR, certain of the Company's loans and other financial instruments originated and/or purchased in prior periods include attributes that are either directly or indirectly dependent on LIBOR. The transition from LIBOR could create additional costs and risk. Since proposed alternative rates are calculated differently, payments under contracts referencing new rates will differ from those referencing LIBOR. The transition will change Cass' market risk profiles, requiring changes to risk and pricing models, valuation tools, product design and hedging strategies. Failure to adequately manage this transition process could adversely impact the Company's reputation.

Operations of the Company's customer base are impacted by macro-economic factors such as a strong dollar and/or volatility in commodity prices. A reduction in its customers' operations could have a material adverse effect on Cass' results of operations.

A decline in the cost of oil worldwide can have a negative effect on both the number of freight transactions processed and the dollar amount of invoices processed. For example, lower oil prices can cause a significant drop in drilling supplies being transported to fracking operations by domestic railroads and trucks. Lower oil prices can also result in lower gas and fuel prices, negatively affecting the dollar amounts of the invoices that Cass processes for its freight and shipping customers. A decline in oil prices could have an adverse effect on the Company's revenues and could significantly impact its results of operations.

Business Operations and Strategic Risk

Operational difficulties or cybersecurity problems could damage Cass' reputation and business.

In the ordinary course of business, the Company depends on the reliable operation of its computer operations and network connections from its clients to its systems. Any failure, interruption, or breach in security of these systems would cause Cass to be unable to process transactions for its clients, resulting in decreased revenues. The Company also relies on electronic communications and information systems to store sensitive customer data. Any failure, interruption, breach in security or loss of data, whatever the cause, could reduce client satisfaction with the Company's products and services and harm Cass' financial results. These types of threats may derive from human error, fraud or malice on the part of external or internal parties, or may result from accidental technological failure. Further, to access the Company's products and services, Cass' customers may use computers and mobile devices that are beyond the Company's security control systems. The Company's technologies, systems, networks and software, and those of other financial institutions have been, and are likely to continue to be, the target of cybersecurity threats and attacks, which may range from uncoordinated individual attempts to sophisticated and targeted measures directed at Cass. The risk of a security breach or disruption, particularly through cyber-attack or cyber intrusion, has increased as the number, intensity and sophistication of attempted attacks and intrusions from around the world have increased. A material security problem affecting Cass could damage its reputation, deter prospects from purchasing its products and services, deter customers from using its products and services or result in liability to Cass.

Cloud technologies are also critical to the operation of the Company's systems, and reliance on cloud technologies is growing. Service disruptions in cloud technologies may lead to delays in accessing, or the loss of, data that is important to the Company's businesses and may hinder customers access to products and services.

Although the Company makes significant efforts to maintain the security and integrity of Cass' information systems and have implemented various measures to manage the risk of a security breach or disruption, there can be no assurance that Cass' security efforts and measures will be effective or that attempted security breaches or disruptions would not be successful or damaging. Even the most well protected information, networks, systems and facilities remain potentially vulnerable because attempted security breaches, particularly cyber-attacks and intrusions, or disruptions will occur in the future, and because the techniques used in such attempts are constantly evolving and generally are not recognized until launched against a target, and in some cases are designed not to be detected and, in fact, may not be detected. Accordingly, the Company may be unable to anticipate these techniques or to implement adequate security barriers or other preventative measures, and thus it is virtually impossible to entirely mitigate this risk. While specific "cyber" insurance coverage is maintained, which would apply in the event of various breach scenarios, the amount of coverage may not be adequate in any particular case. Furthermore, because cyber threat scenarios are inherently difficult to predict and can take many forms, some breaches may not be covered under Cass' cyber insurance coverage. A security breach or other significant disruption of Cass' information systems or those related to customers, merchants and third-party vendors, including as a result of cyber-attacks, could 1) disrupt the proper functioning of Cass' networks and systems and therefore operations and/or those of certain customers; 2) result in the unauthorized access to, and destruction, loss, theft, misappropriation or release of confidential, sensitive or otherwise valuable information of the Company or its customers; 3) result in a violation of applicable privacy, data breach and other laws, subjecting the Company to additional regulatory scrutiny and expose Cass to civil litigation, governmental fines and possible financial liability; 4) require significant management attention and resources to remedy the damages that result; or 5) harm Cass' reputation or cause a decrease in the number of customers that choose to do business with the Company. The occurrence of any of the foregoing could have a material adverse effect on Cass' business, financial condition and results of operations.

Cass must respond to rapid technological changes and these changes may be more difficult or expensive than anticipated.

If competitors introduce new products and services embodying new technologies, or if new industry standards and practices emerge, the Company's existing product and service offerings, technology and systems may become obsolete. Further, if Cass fails to adopt or develop new technologies or to adapt its products and services to emerging industry standards, Cass may lose current and future customers. Finally, Cass' ability to adopt these technologies can also be inhibited by intellectual property rights of third parties. Any of these could have a material adverse effect on its business, financial condition and results of operations. The payment processing and financial services industries are changing rapidly and in order to remain competitive, Cass must continue to enhance and improve the functionality and features of its products, services and technologies. These changes may be more difficult or expensive than the Company anticipates.

Methods of reducing risk exposures might not be effective.

Instruments, systems and strategies used to hedge or otherwise manage exposure to various types of credit, interest rate, market and liquidity, operational, regulatory/compliance, business risks and enterprise-wide risks could be less effective than anticipated. As a result, the Company may not be able to effectively mitigate its risk exposures in particular market environments or against particular types of risk.

Customer borrowing, repayment, investment, deposit, and payable processing practices may be different than anticipated.

The Company uses a variety of financial tools, models and other methods to anticipate customer behavior as part of its strategic and financial planning and to meet certain regulatory requirements. Individual, economic, political and industry-specific conditions and other factors outside of Cass' control could alter predicted customer borrowing, repayment, investment, deposit, and payable processing practices. Such a change in these practices could adversely affect Cass' ability to anticipate business needs, including cash flow and its impact on liquidity, and to meet regulatory requirements.

The Company's allowance for credit losses ("ACL") is subject to continuing evaluation and may be insufficient.

The Company maintains an ACL, which is a reserve established through a provision for credit losses charged to expense. The ACL is a valuation account that is deducted from the amortized cost basis to present the net amount expected to be collected on loans. Management uses a systematic, documented approach in determining the appropriate level of ACL, which represents management's estimate of losses in loans and off-balance sheet exposures as of the balance sheet date. Management estimated the allowance balance using relevant available information from internal and external factors, relating to past events, current conditions and reasonable and supportable forecasts based on economic sources, such as

Gross Domestic Product ("GDP"). Historical credit loss experience, of both the Company and similar peer banks, provides the basis for the estimation of expected credit losses. Adjustments to historical loss information are made for lending management experience, asset quality trends, borrower's ability to pay, collateral, and other environmental factors. The ACL is measured on a collective pool basis when similar risk characteristics exist. The determination of the appropriate level of the allowance for credit losses inherently involves a high degree of subjectivity and requires management to make estimates based on risks and trends that are subject to material change.

The determination and application of the ACL accounting policy involves judgments, estimates, and uncertainties that are subject to change. Changes in these assumptions, estimates or the conditions surrounding them may have a material impact on the Company's financial condition, liquidity or results of operations. Various regulatory agencies, as an integral part of the examination process, periodically review the ACL. Such agencies may require the Company to recognize additions to the ACL or reserve increases to adversely graded classified loans based on information available to them at the time of their examinations.

The application of the model used to determine the ACL could result in volatility in earnings. Additionally, if charge-offs in future periods exceed the ACL, the Company will need additional provisions to increase the ACL. Any increases in the ACL will result in a decrease in net income and, possibly, capital, and may have a material adverse effect on the Company's business, financial condition and results of operations.

See Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Provision and Allowance for Credit Losses and Unfunded Commitments" and Item 8, "Financial Statements and Supplementary Data—Note 1" for additional information.

Competitive product and pricing pressure within Cass' markets may change.

The Company operates in a very competitive environment, which is characterized by competition from a number of other vendors and financial institutions in each market in which it operates. The Company competes with large payment processors and national and regional financial institutions and also smaller auditing companies and banks in terms of products and pricing. If the Company is unable to compete effectively in products and pricing in its markets, business could decline.

Management's ability to maintain and expand customer relationships may differ from expectations.

The industries in which the Company operates are very competitive. The Company not only competes for business opportunities with new customers, but also competes to maintain and expand the relationships it has with its existing customers. The Company continues to experience pressures to maintain these relationships as its competitors attempt to capture its customers.

The introduction, withdrawal, success and timing of business initiatives and strategies, including, but not limited to, the expansion of payment and processing activities to new markets, the expansion of products and services to existing markets and opening of new bank branches, may be less successful or may be different than anticipated. Such a result could adversely affect Cass' business.

The Company makes certain projections as a basis for developing plans and strategies for its payment processing and banking products. If the Company does not accurately determine demand for its products and services, it could result in the Company incurring significant expenses without the anticipated increases in revenue, which could result in an adverse effect on its earnings.

In addition, there are risks and uncertainties associated with the introduction of new products and services, including substantial investments of time and resources. The introduction and development of new products and services may not be achieved along expected timelines, or at all, and may not be successful as a result of factors beyond the Company's control, including regulatory, competition and external market factors. Failure to successfully manage these risks in the development and implementation of new products or services, and failure to integrate such new products and services into our existing system of internal controls, could have a material adverse effect on our business, financial condition and results of operations.

The Company and the Bank are subject to liquidity risk.

The Company requires liquidity to meet deposit and accounts and drafts payable obligations as they come due. Access to funding sources in amounts adequate to finance the Company's commitments and business activities or on terms that are acceptable or favorable to the Company could be impaired by risks and uncertainties that are beyond the Company's control, including those described in this Item 1A, "Risk Factors" section.

The Company's access to deposits and accounts and drafts payable for liquidity purposes may also be adversely affected by the needs of the Company's depositors and customers. A failure to maintain adequate liquidity could have a material adverse effect on the Company's business, financial condition and results of operations.

Management's ability to retain key officers and employees may change.

Cass' future operating results depend substantially upon the continued service of Cass' executive officers and key personnel. Cass' future operating results also depend in significant part upon Cass' ability to attract and retain qualified management, financial, technical, marketing, sales, and support personnel. Competition for qualified personnel is intense, and the Company cannot ensure success in attracting or retaining qualified personnel. There may be only a limited number of persons with the requisite skills to serve in these positions, and it may be increasingly difficult for the Company to hire personnel over time. Cass' business, financial condition and results of operations could be materially adversely affected by the loss of any of its key employees, by the failure of any key employee to perform in his or her current position, or by Cass' inability to attract and retain skilled employees.

Regulatory, Legal and Accounting Risk

The Company and the Bank are subject to extensive government regulation and supervision and possible enforcement or other legal actions that could detrimentally affect Cass' business.

The Company and the Bank are subject to extensive federal and state regulation and supervision, the primary focus of which is to protect customers, depositors, the deposit insurance fund and the safety and soundness of the banking system as a whole, and not shareholders. In addition, since the global financial crisis, financial institutions generally have been subject to increased scrutiny from regulatory authorities, with an increased focus on risk management and consumer compliance. This regulatory structure and heightened focus gives the regulatory authorities extensive discretion in connection with their supervisory and enforcement activities and examination policies, including policies with respect to capital levels, the timing and amount of dividend payments, the classification of assets and the establishment of adequate loan loss reserves for regulatory purposes. Failure to comply with applicable laws, regulations, policies or guidance could result in enforcement and other legal actions by federal and state authorities, including criminal and civil penalties, the loss of FDIC insurance, revocation of a banking charter, and other regulatory sanctions, as well as reputational damage, any of which could have a material adverse effect on the Company's business, financial condition and results of operations.

Congress and federal regulatory agencies continually review banking laws, regulations and policies for possible changes. The substance and impact of pending or future legislation or regulation, or the application thereof, cannot be predicted, although any change could impact the regulatory structure under which the Company or its competitors operate and may significantly increase costs, impede the efficiency of internal business processes, require an increase in regulatory capital, require modifications to the Company's business strategy, and/or limit its ability to pursue business opportunities in an efficient manner. A change in statutes, regulations or regulatory policies applicable to the Company or any of its subsidiaries could have a material, adverse effect on the Company's business, financial condition and results of operations.

See Item 1, "Business—Supervision and Regulation," and Item 8, Note 2 to the consolidated financial statements included elsewhere in this report for additional information.

The Company may need to raise additional capital or sell assets if it fails to meet regulatory capital requirements or meet commitments and liquidity needs. Such capital may not be available on favorable terms, or at all.

Fully phased in, the Basel III Capital rules implemented stricter capital requirements and leverage limits and methods for calculating risk-weighted assets, meaning the Company is required to hold more capital against such assets. Complying with these more stringent capital requirements could result in management modifying its business strategy and could limit the Company's ability to make distributions, including paying dividends, or buying back shares.

The Company may also need to raise additional capital in the future to provide it with sufficient capital resources and liquidity to meet commitments and business needs. The ability to raise additional capital, if needed, will depend on, among other things, conditions in the capital markets at that time and the Company's financial condition, as well as the need for other financial institutions to raise capital at the same time. Economic conditions and the loss of confidence in financial institutions may increase the cost of funding and limit access to certain customary sources of capital, including inter-bank borrowings, repurchase agreements and borrowings from the discount window of the Federal Reserve.

An inability to raise additional capital on acceptable terms when needed could have a materially adverse effect on the Company's business, financial condition and results of operations.

Legal and regulatory proceedings and related matters with respect to the financial services industry, including those directly involving the Company and its subsidiaries, could adversely affect Cass or the financial services industry in general.

The Company is subject to various legal and regulatory proceedings. It is inherently difficult to assess the outcome of these matters, and there can be no assurance that the Company will prevail in any proceeding or litigation. Any such matter could result in substantial cost and diversion of Cass' efforts, which by itself could have a material adverse effect on Cass' financial condition and operating results. Further, adverse determinations in such matters could result in actions by Cass' regulators that could materially adversely affect Cass' business, financial condition or results of operations. Please refer to Item 3, "Legal Proceedings."

The Company's accounting policies and methods are the basis of how Cass reports its financial condition and results of operations, and they require management to make estimates about matters that are inherently uncertain. In addition, changes in accounting policies and practices, as may be adopted by the regulatory agencies, the Financial Accounting Standards Board, or other authoritative bodies, could materially impact Cass' financial statements.

The Company's accounting policies and methods are fundamental to how Cass records and reports its financial condition and results of operations. Management must exercise judgment in selecting and applying many of these accounting policies and methods in order to ensure that they comply with generally accepted accounting principles and reflect management's judgment as to the most appropriate manner in which to record and report Cass' financial condition and results of operations. In some cases, management must select the accounting policy or method to apply from two or more alternatives, any of which might be reasonable under the circumstances yet might result in the Company reporting materially different amounts than would have been reported under a different alternative.

Cass has identified one accounting policy as being "critical" to the presentation of its financial condition and results of operations because it requires management to make particularly subjective and/or complex judgments about matters that are inherently uncertain and because of the likelihood that materially different amounts would be reported under different conditions or using different assumptions. More information on Cass' critical accounting policies is contained in Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations."

From time to time, the regulatory agencies, the Financial Accounting Standards Board ("FASB"), and other authoritative bodies change the financial accounting and reporting standards that govern the preparation of the Company's financial statements. These changes can be hard to predict and can materially impact how management records and reports the Company's financial condition and results of operations.

Cass is subject to examinations and challenges by tax authorities, which, if not resolved in the Company's favor, could adversely affect the Company's financial condition and results of operations.

In the normal course of business, Cass and its affiliates are routinely subject to examinations and challenges from federal and state tax authorities regarding the amount of taxes due in connection with investments it has made and the businesses in which it is engaged. Recently, federal and state taxing authorities have become increasingly aggressive in challenging tax positions taken by financial institutions. These tax positions may relate to tax compliance, sales and use, franchise, gross receipts, payroll, property and income tax issues, including tax base, apportionment and tax credit planning. The challenges made by tax authorities may result in adjustments to the timing or amount of taxable income or deductions or the allocation of income among tax jurisdictions. If any such challenges are made and are not resolved in the Company's favor, they could have an adverse effect on Cass' financial condition and results of operations.

General Risk Factors

Cass' stock price can become volatile and fluctuate widely in response to a variety of factors.

The Company's stock price can fluctuate based on factors that can include actual or anticipated variations in Cass' quarterly results; new technology or services by competitors; unanticipated losses or gains due to unexpected events, including losses or gains on securities held for investment purposes; significant acquisitions or business combinations, strategic partnerships, joint ventures or capital commitments by or involving the Company or its competitors; changes in accounting policies or practices; failure to integrate acquisitions or realize anticipated benefits from acquisitions; or changes in government regulations.

General market fluctuations, industry factors and general economic and political conditions, such as economic slowdowns or recessions, governmental intervention, interest rate changes, credit loss trends, low trading volume or currency fluctuations also could cause Cass' stock price to decrease regardless of the Company's operating results.

Certain events beyond the Company's control, such as severe weather, natural disasters, terrorist activities or other hostilities, may adversely affect the general economy, financial and capital markets, specific industries, and the Company.

Severe weather, natural disasters, acts of terrorism or other hostilities, and other adverse external events beyond the Company's control, could have a significant impact on the Company's ability to conduct business. Such events could disrupt Cass' operations or those of its customers, affect the stability of the Bank's deposit base, impair the ability of borrowers to repay outstanding loans, impair the value of collateral securing loans, cause significant property damage, result in loss of revenue and/or cause the Company to incur additional expenses. The occurrence of any such event in the future could have a material adverse effect on the Company's business, which, in turn, could have a material adverse effect on the Company's financial condition and results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

In September 2012, the Company entered into a 10-year lease for office space in St. Louis County, Missouri, to house the headquarters of the Company and the Bank. The Company's headquarters occupy 13,991 square feet in an office center at 12444 Powerscourt Drive along with 3,563 square feet in the same center at 12412 Powerscourt Drive. The Bank's headquarters occupy 10,564 square feet in the same center at 12412 Powerscourt Drive.

The Company owns approximately 61,500 square feet of office space at 13001 Hollenberg Drive in Bridgeton, Missouri where the Company's transportation processing activities are performed.

The Company owns a production facility of approximately 45,500 square feet located at 2675 Corporate Exchange Drive, Columbus, Ohio. Additional facilities are located in Greenville, South Carolina, Wellington, Kansas, and Jacksonville, Florida. The Company has offices in Breda, Netherlands, Basingstoke, United Kingdom, and Singapore to service its multinational customers.

In addition, the Bank owns a banking facility near downtown St. Louis, Missouri, has an operating branch in the Bridgeton, Missouri location, and has additional leased facilities in Fenton, Missouri and Colorado Springs, Colorado.

Management believes that these facilities are suitable and adequate for the Company's operations.

ITEM 3. LEGAL PROCEEDINGS

The Company and its subsidiaries are not involved in any pending proceedings other than ordinary routine litigation incidental to their businesses. Management believes none of these proceedings, if determined adversely, would have a material effect on the business or financial conditions of the Company or its subsidiaries.

ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

PART II

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

The Company's common stock is quoted on The Nasdaq Global Select Market® under the symbol "CASS." As of February 15, 2022, there were approximately 3,904 holders of record of the Company's common stock.

The Company has continuously paid regularly scheduled cash dividends since 1934 and expects to continue to pay quarterly cash dividends in the future. However, future dividend payments will depend on the Company's earnings, capital requirements, financial condition, applicable banking regulatory requirements and other factors considered relevant by the Company's Board of Directors.

The Company maintains a treasury stock buyback program approved by the Board of Directors in October 2021 pursuant to which the Board of Directors has authorized the repurchase of up to 750,000 shares of the Company's common stock and has no expiration date. The Company repurchased a total of 713,857 shares at an aggregate cost of $30,997,000 during the year ended December 31, 2021 and 162,901 shares at an aggregate cost of $6,825,000 during the year ended December 31, 2020. A portion of the repurchased shares may be used for the Company's employee benefit plans, and the balance will be available for other general corporate purposes. The pace of repurchase activity will depend on factors such as levels of regulatory capital, cash generation from operations, cash requirements for investments, repayment of debt, current stock price, business and market conditions, and other factors. The Company may repurchase shares from time to time on the open market or in private transactions, including structured transactions. The stock repurchase program may be modified or discontinued at any time.

During the three months ended December 31, 2021, the Company repurchased a total of 278,919 shares of its common stock pursuant to its treasury stock buyback program, as follows:

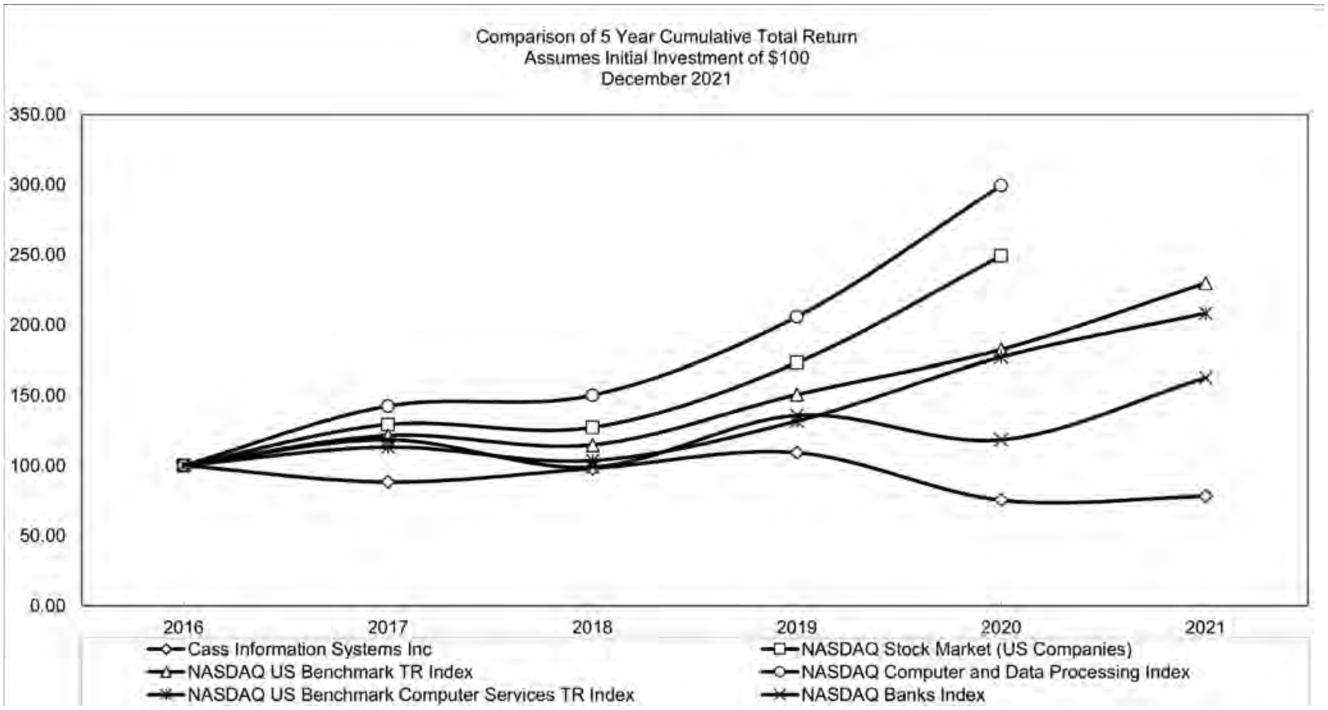
Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs[1]	Maximum Number of Shares that May Yet Be Purchased Under the Plans or Programs
October 1, 2021 – October 31, 2021	28,443	42.25	28,443	721,557
November 1, 2021 – November 30, 2021	135,022	44.81	135,022	586,535
December 1, 2021 – December 31, 2021	115,454	$ 41.50	115,454	471,081
Total	278,919	$ 43.10	278,919	471,081

(1) All repurchases made during the quarter ended December 31, 2021 were made pursuant to the treasury stock buyback program, authorized by the Board of Directors on October 19, 2021 and announced by the Company on October 21, 2021. The program provides that the Company may repurchase up to an aggregate of 750,000 shares of common stock and has no expiration date.

Performance Quoted on The Nasdaq Stock Market for the Last Five Fiscal Years

The following graph compares the cumulative total returns over the last five fiscal years of a hypothetical investment of $100 in shares of common stock of the Company with a hypothetical investment of $100 in The Nasdaq Stock Market

(“Nasdaq”), the index of Nasdaq computer and data processing stocks, and the index of Nasdaq bank stocks. The graph assumes $100 was invested on December 31, 2016, with dividends reinvested. Returns are based on period end prices.



ITEM 6. RESERVED

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

The following Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") is intended to promote understanding of the results of operations and financial condition. MD&A is provided as a supplement to, and should be read in conjunction with, the consolidated financial statements and the accompanying Notes to Financial Statements (Part II, Item 8 of this Form 10-K). This section generally discusses the results of operations for 2021 compared to 2020. For discussion related to the results of operations and changes in financial condition for 2020 compared to 2019 refer to Part II, Item 7, Management's Discussion and Analysis of Financial Condition and Results of Operations in the Company's 2020 Annual Report on Form 10-K filed with the SEC on February 26, 2021.

The Company intends for the discussion of financial condition and results of operations that follows to provide information that will assist the reader in understanding the Consolidated Financial Statements, the changes in certain key items in those financial statements from year to year, and the primary factors that accounted for those changes, as well as how certain accounting principles, policies, and estimates affect the Consolidated Financial Statements. This discussion should be read in conjunction the Consolidated Financial Statements and the related notes that appear in Part II, Item 8 of this document.

Executive Overview

The specific payment and information processing services provided to each customer are developed individually to meet each customer’s requirements, which can vary greatly. In addition, the degree of automation such as electronic data interchange, imaging, work flow, and web-based solutions varies greatly among customers and industries. These factors combine so that pricing varies greatly among the customer base. In general, however, Cass is compensated for its processing services through service fees and investment of account balances generated during the payment process. The amount, type, and calculation of service fees vary greatly by service offering, but generally follow the volume of transactions processed. Interest income from the balances generated during the payment processing cycle is affected by the amount of time Cass holds the funds prior to payment and the dollar volume processed. Both the number of transactions processed and the dollar volume processed are therefore key metrics followed by management. Other factors will also influence revenue and profitability, such as changes in the general level of interest rates, which have a significant effect on net interest income. The funds generated by these processing activities are invested in overnight investments, investment grade securities, advances to payees, and loans generated by the Bank. The Bank earns most of its revenue from net interest income, or the difference between the interest earned on its loans and investments and the interest paid on its deposits and other borrowings. The Bank also assesses fees on other services such as cash management services.

Industry-wide factors that impact the Company include the willingness of large corporations to outsource key business functions such as freight, energy, telecommunication and environmental payment and audit. The benefits that can be achieved by outsourcing transaction processing, and the management information generated by Cass' systems can be influenced by factors such as the competitive pressures within industries to improve profitability, the general level of transportation costs, deregulation of energy costs, and consolidation of telecommunication providers. Economic factors that impact the Company include the general level of economic activity that can affect the volume and size of invoices processed, the ability to hire and retain qualified staff, and the growth and quality of the loan portfolio. The general level of interest rates also has a significant effect on the revenue of the Company. As discussed in greater detail in Item 7A, "Quantitative and Qualitative Disclosures about Market Risk," a decline in the general level of interest rates can have a negative impact on net interest income and conversely, a rise in the general level of interest rates can have a positive impact on net interest income. The cost of fuel is another factor that has a significant impact on the transportation sector. As the price of fuel goes up or down, the Company's earnings increase or decrease with the dollar amount of transportation invoices.

In 2021, total fee revenue and other income increased $9,251,000, or 9%, net interest income after provision for credit losses decreased $59,000, total operating expenses increased $5,711,000, or 5%, and net income increased $3,428,000, or 14%. This performance in 2021 rebounded from 2020, which was more severely impacted by the COVID-19 global pandemic. For payment processing services, dollar volumes experienced a significant increase during 2021 which contributed to the increase in total fee revenue and other income. The Federal Reserve's actions to lower the Federal Funds rate during the first quarter of 2020 adversely impacted net interest income. However, an increase in interest-earning assets, specifically in loans and investment securities, were able to mostly offset the impact of a lower interest rate environment and resulting lower net interest margin. Total operating expenses increased as a higher number of transactions processed had a corresponding rise in personnel and other expenses. The asset quality of the Company's loans and investments as of December 31, 2021 remained strong.

Currently, management views Cass' major opportunity as the continued expansion of its payment and information processing service offerings and customer base. Management intends to accomplish this by maintaining the Company's leadership position in applied technology, which when combined with the security and processing controls of the Bank, makes Cass unique in the industry.

Critical Accounting Policies

The Company has prepared the consolidated financial statements in this report in accordance with the FASB Accounting Standards Codification ("ASC"). In preparing the consolidated financial statements, management makes estimates and assumptions that affect the reported amount of assets and liabilities, disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period. These estimates have been generally accurate in the past, have been consistent and have not required any material changes. There can be no assurances that actual results will not differ from those estimates. A summary of significant accounting policies and a summary of recent accounting pronouncements applicable to the Company's Consolidated Financial Statements are included in Item 8, "Financial Statements and Supplementary Data—Note 1."

The accounting policy that requires significant management estimates and is deemed critical to the Company's results of operations or financial position has been discussed with the Audit Committee of the Board of Directors and is described below.

Allowance for Credit Losses. The Company performs periodic and systematic detailed reviews of its loan portfolio to determine management's estimate of the lifetime expected credit losses. The process combines many factors: economic factors, historical credit loss experience, of both the Company and similar peer banks, loan portfolio growth and concentrations, asset quality, lending management experience and risk tolerance, and other qualitative and quantitative factors which could affect future credit loss. Given the Company's recent historical loss experience, the impact of the qualitative risk factors related to the collective ACL is a substantial percentage of the overall ACL. Because current economic conditions and forecasts can change and future events are inherently difficult to predict, the anticipated amount of estimated credit losses, and therefore the appropriateness of the ACL, could change significantly. It is difficult to estimate how potential changes in any one economic factor or input might affect the overall allowance because a wide variety of factors and inputs are considered in estimating the ACL and changes in those factors and inputs considered may not occur at the same rate and may not be consistent across all loan types. Additionally, changes in factors and inputs may be directionally inconsistent, such that improvement in one factor may offset deterioration in others. Various regulatory agencies, as an integral part of the examination process, periodically review the ACL. Such agencies may require the Company to recognize additions to the ACL or reserve increases to adversely graded classified loans based on information available to them at the time of their examinations. The Company believes the level of ACL is appropriate. These policies affect both segments of the Company. The impact and associated risks related to these policies on the Company's business operations are discussed in the Note 1 Summary of Significant Accounting Policies and Note 4 Loans, as well as the "Provision and Allowance for Credit Losses and Allowance for Unfunded Commitments" section of this report.

Impact of COVID-19 on the Company's Business

During the year ended December 31, 2020, the effects of COVID-19 and related actions to attempt to control its spread significantly impacted the global economy and adversely affected the Company's operating results in both the Information Services and Banking Services segments. Substantial progress has been made to combat the spread of COVID-19, and financial results for the year-ended December 31, 2021 were driven, in part, by the continual improvement in economic conditions as compared to the same period in 2020, when the negative economic impact of the COVID-19 pandemic was most pronounced on Cass and its customers. Though macroeconomic conditions continue to trend positive as of December 31, 2021, the Company could experience future negative effects on its business, financial condition, results of operations, and cash flows if there continue to be significant outbreaks of COVID-19.

Information Services
With the spread of COVID-19 to the U.S. in the first quarter of 2020, many state and local governments recommended or mandated limitations on crowd size, closures of businesses and shelter-in-place orders in order to slow the transmission. The extent and nature of government actions varied during fiscal years 2020 and 2021 based upon the then-current extent and severity of the COVID-19 pandemic within the respective localities. Severe business disruptions, resulting constrictions in the manufacturing sector for most of 2020 and into the first quarter of 2021, labor force shortages, decreased oil demand and prices and general economic uncertainty, significantly and adversely impacted the Company's customers' business operations and had a corresponding negative affect on the Company's revenue generation in each sector of the Company's Information Services segment. The Federal Reserve also took action to lower the Federal Funds rate in connection with COVID-19 relief, adversely affecting the Company's net interest income and operating results tied to Banking Services.

However, as vaccines for combatting Covid-19 became widely available in the United States in the first half of 2021 and the economy began to improve, consumer demand for products and services rebounded. Companies critical to the global supply chain, such as those in warehousing and transporting services, continued to experience the negative effects of the pandemic-related disruptions. As a result, carrier supply scarcity led to higher transportation costs and an increase in the Company's transportation payment and processing fee revenues in fiscal 2021.

Banking Services
Like all banks and bank holding companies, the Company's Banking Services segment has been especially impacted by instability in the global capital markets due to the COVID-19 pandemic. The Federal Reserve also took action to lower the Federal Funds rate to near zero levels in connection with COVID-19 relief, adversely affecting the Company's net interest income and operating results tied to Banking Services.

During 2020 and into the first half of 2021, Bank regulatory agencies and various governmental authorities urged financial institutions to work prudently with borrowers who were unable to meet their contractual payment obligations because of the effects of COVID-19. Accordingly, and in coordination with its primary regulators, the Company deferred borrower principal payments on loans, on an as needed basis, for periods of up to six months. There were no borrowers remaining on deferred terms at December 31, 2021.

In response to COVID-19, the Coronavirus Aid, Relief, and Economic Security ("CARES") Act was adopted on March 27, 2020. The CARES Act provided for an estimated $2.2 trillion to fight the COVID-19 pandemic and stimulate the economy by supporting individuals and businesses through loans, grants, tax changes, and other types of relief. Among other things, the CARES Act established the Paycheck Protection Program ("PPP"), which allowed entities to apply for low-interest private loans to fund payroll and other costs which, subject to certain conditions and qualifications, are partially or fully forgivable. In March 2021, the American Rescue Plan Act of 2021 was enacted, which among other things, provided for additional funding and expansion of the PPP. In support of the CARES Act, the Bank processed nearly 350 applications for PPP loans of approximately $170,000,000 during the year ended December 31, 2020 and an additional 110 applications for approximately $40,000,000 during the year-ended December 31, 2021 to provide much-needed cash to small business and self-employed taxpayers during the COVID-19 crisis. The loans were primarily made to existing bank customers and are

100% guaranteed by the SBA. As of December 31, 2021, substantially all of these PPP loans were forgiven by the SBA with $6,299,000 remaining outstanding.

Throughout 2020 and 2021, Congress enacted several pieces of legislation aimed at providing economic aid and stimulus to individuals and businesses in response to the Covid-19 pandemic's severe economic interruptions. Among others, these significant actions included direct federal stimulus payments, a moratorium on evictions and foreclosures, deferral of federal student loan payments, increases in tax benefits, state and local government funding, and an expansion of bankruptcy relief for small businesses and individuals.

The stimulus actions of the federal government and policies implemented by the Federal Reserve have contributed to an increase in inflation during most of 2021. As a result, in December 2021, the Federal Reserve released projections related to the target range for the Federal Funds rate that imply varied increases in the rate over the next few years. There can be no assurance that any increases in the Federal Funds rate will occur, and the Company continues to monitor these developments.

While vaccination efforts are ongoing and a significant amount of previous business and other restrictions have been lifted, the ongoing impact of COVID-19, including any increases in infection rates, new variants, supply chain disruptions, labor force shortages, renewed restrictions to combat its spread, and the enactment of new laws and regulations that affect banks and bank holding companies, cannot be estimated. Given these and other uncertainties discussed throughout this report, the Company remains subject to heightened risk, and the aggregate impact that COVID-19 could have on the Company's financial condition and operating results is presently unknown.

The Company remains committed to creating a safe and healthy environment for employees while offering assurance that it remains a financially strong service provider possessing the resources necessary to weather this pandemic in support of its valued customers.

For further discussion on COVID-19 and its impact on the Company, refer to Item 8, "Financial Statements and Supplementary Data—Note 1.

Summary of Results

	For the Years Ended December 31,			% Change	
(In thousands except per share data)	**2021**	**2020**	**2019**	**2021 v. 2020**	**2020 v. 2019**
Fee revenue and other income	$ 109,691	$ 100,441	$ 110,069	9.2 %	(8.7)%
Net interest income after provision	44,456	44,515	47,166	(0.1)	(5.6)
Operating expense	120,326	114,615	119,769	5.0	(4.3)
Income before income tax expense	33,821	30,341	37,466	11.5	(19.0)
Income tax expense	5,217	5,165	7,062	1.0	(26.9)
Net income	$ 28,604	$ 25,176	$ 30,404	13.6	(17.2)
Diluted earnings per share	$ 2.00	$ 1.73	$ 2.07	15.6	(16.4)
Average earning assets	$ 1,999,609	$ 1,674,297	$ 1,472,399	19.4	13.7
Return on average assets	1.23 %	1.29 %	1.74 %	—	—
Return on average equity	11.29 %	10.23 %	12.86 %	—	—
Net interest margin(1)	2.31 %	2.82 %	3.36 %	—	—
Total processing volume	64,039	60,476	63,567	5.9	(4.9)
Total invoice dollars processed and paid	$52,697,397	$39,975,033	$42,973,242	31.8	(7.0)

(1) Presented on a tax-equivalent basis.

The results of 2021 compared to 2020 include the following significant items:

Overall, the Company's revenue and profitability improved, primarily as a result of the increases in total processing volume and total invoice dollars processed and paid as compared to the prior year. Processing volume and invoice dollars processed increased 6% and 32%, respectively. The significant increase in dollars processed was due to excess shipping miles in the freight network due to supply chain disruptions, fuel surcharges, and scarcity of carrier supply, among other factors. In addition, far fewer pandemic-related restrictions imposed on the restaurant, retail and hospitality sectors as compared to 2020 also contributed to the increase. The higher dollar volumes helped produce the 10% increase in payment and processing fees via financial fees earned on payment volumes.

The increase in dollar volumes also assisted in driving an increase in average earning assets of 19%. However, net interest income after provision for credit losses was flat year over year. The Federal Reserve's actions to lower the Federal Funds rate in the first quarter of 2020, adversely impacted the net interest rate margin which declined to 2.31% as compared to 2.82%in the prior year. The increase in average earning assets partially offset the impact of the near-zero interest rate environment on the Company's net interest margin. There was also a release of credit losses recorded of $130,000 in 2021 compared to a provision for credit losses of $810,000 in 2020. The positive variance in the provision for credit losses was primarily due to improved economic conditions in 2021, partially offset by the impact of loan growth on the Company's ACL calculation.

Operating expenses increased 5%, as the increase in the number of transactions processed had a corresponding impact on personnel expense. In addition, the Company continued the strategic investment in various technology initiatives in an effort to improve customer experience and drive efficiencies with respect to invoice payment and processing.

The Company's return on average equity and diluted earnings per share improved as compared to the prior year driven by higher earnings and share buybacks which reduced outstanding diluted shares and shareholders' equity.

Fee Revenue and Other Income

The Company's fee revenue is derived mainly from transportation and facility payment and processing fees. As the Company provides its processing and payment services, it is compensated by service fees which are typically calculated on a per-item basis, discounts received for services provided to carriers and by the accounts and drafts payable balances generated in the payment process which can be used to generate interest income. Processing volumes, fee revenue and other income were as follows:

	December 31,			% Change	
(In thousands)	**2021**	**2020**	**2019**	**2021 v. 2020**	**2020 v. 2019**
Transportation invoice transaction volume	36,783	33,184	36,042	10.8 %	(7.9)%
Transportation invoice dollar volume	$ 36,829,841	$ 26,516,803	$ 28,090,514	38.9	(5.6)
Expense management transaction volume[(1)]	27,256	27,292	27,525	(0.1)	(0.8)
Expense management dollar volume[(1)]	$ 15,867,556	$ 13,458,230	$ 14,882,728	17.9	(9.6)
Payment and processing revenue	$ 106,455	$ 97,204	$ 107,953	9.5	(10.0)
Bank service fees	$ 2,239	$ 1,704	$ 1,386	31.4	22.9
Gains on sales of investment securities	$ 51	$ 1,075	$ 19	(95.3)	5,557.9
Other	$ 946	$ 458	$ 711	106.6	(35.6)

(1) Includes energy, telecom and environmental

The increase in invoice transaction volume in transportation was driven by an increase in economic activity as compared to 2020 in addition to new customer acquisition. Transaction volumes in expense management were flat year over year as new customer acquisition almost fully offset the loss of one large customer in the prior year.

The 39% increase in dollars processed in transportation was due to excess shipping miles in the freight network due to supply chain disruptions, fuel surcharges, and scarcity of carrier supply, among other factors. The 18% increase in dollar volumes in expense management was driven by far fewer pandemic-related restrictions imposed on the restaurant, retail and hospitality sectors as compared to 2020.

The higher dollar volumes helped produce the 10% increase in payment and processing fees via financial fees earned on payment volumes. In addition, the increase in transportation invoice transaction volume also positively contributed to the increase in payment and processing fees in 2021.

Bank service fees increased 31% year over year due to organic growth, specifically growth in the Company's integrated payments business.

There were gains from the sale of securities in 2021 and 2020 of $51,000 and $1,075,000, respectively.

Other income increased primarily due to the purchase of additional bank-owned life insurance in September 2021 and an increase in death benefits received over the prior year.

Net Interest Income

Net interest income is the difference between interest earned on loans, investments, and other earning assets and interest expense on deposits and other interest-bearing liabilities. Net interest income is a significant source of the Company's revenues. The following table summarizes the changes in tax-equivalent net interest income and related factors:

	December 31,			% Change	
(In thousands)	**2021**	**2020**	**2019**	**2021 v. 2020**	**2020 v. 2019**
Average earning assets	$ 1,999,609	$ 1,674,297	$ 1,472,399	19.4 %	13.7 %
Net interest income (1)	$ 46,199	$ 47,214	$ 49,501	(2.1)%	(4.6)%
Net interest margin (1)	2.31 %	2.82 %	3.36 %		
Yield on earning assets (1)	2.37 %	2.96 %	3.71 %		
Rate on interest bearing liabilities	0.20 %	0.49 %	1.32 %		

(1) Presented on a tax-equivalent basis using a tax rate of 21%.

The decrease in net interest income in 2021 compared to 2020 is primarily due to the Federal Reserve's actions to lower the Federal Funds rate in the first quarter of 2020, adversely impacting the net interest rate margin which declined to 2.31% as compared to 2.82% in the prior year. An increase in average earning assets partially offset the impact of the near-zero interest rate environment on the Company's net interest margin. The yield on interest-earning assets declined 59 basis points from 2.96% in 2020 to 2.37% in 2021 while the cost of interest-bearing liabilities declined 29 basis points from 0.49 % in 2020 to 0.20% in 2021.

Average loans decreased $18,699,000, or 2%, to $887,662,000. This decrease was primarily the result of the decline in the average balance of PPP loans of $49,758,000 due to the forgiveness of these loans throughout the year. Excluding PPP loans, average loans increased $31,060,000. The average yield on loans declined 20 basis points to 3.96% in 2021 due to the continued repricing of loans in the current low interest rate environment in addition to lower fees earned on PPP loans.

Average investment securities increased $132,303,000, or 36%. The Company purchased investment securities throughout 2021 in an effort to deploy short-term investments into investment securities to enhance the yield on interest-earning assets. The investment portfolio will expand and contract over time as the Company manages its liquidity and interest rate position. The average yield on investment securities declined 62 basis points to 2.30% in 2021 due to the purchase of investment securities in 2021 in a historically low rate environment.

Average short-term investments, consisting of interest bearing deposits in other financial institutions and federal funds sold, increased $211,963,000, or 53%. The increase is a result of the increase in the average balance of deposits and accounts and drafts payable, partially offset by the purchase of investment securities. The average yield on short-term investments declined 18 basis points to 0.12% in 2021. The vast majority of these short-term investments are held at the Federal Reserve Bank.

Average interest-bearing deposits increased $111,651,000, or 23%, and average non-interest-bearing demand deposits increased $91,447,000, or 26%. These increases were largely due to the impact of government stimulus programs and resulting cash deposits, along with an increase in the Company's integrated payments activity. The cost of interest-bearing deposits decreased 29 basis points to 0.20% in 2021 as a result of the repricing of customer deposits in the historically low interest rate environment.

Distribution of Assets, Liabilities and Shareholders' Equity; Interest Rate and Interest Differential

The following table contains condensed average balance sheets for each of the periods reported, the tax-equivalent interest income and expense on each category of interest-earning assets and interest-bearing liabilities, and the average yield on such categories of interest-earning assets and the average rates paid on such categories of interest-bearing liabilities for each of the periods reported:

	2021			2020			2019		
(In thousands)	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate	Average Balance	Interest Income/ Expense	Yield/ Rate
Assets [1]									
Interest-earning assets									
Loans [2], [3]:	$ 887,662	$ 35,178	3.96 %	$ 906,361	$ 37,665	4.16 %	$ 760,153	$ 36,461	4.80 %
Securities [5]:									
Taxable	192,885	2,547	1.32	75,938	1,686	2.22	103,473	2,465	2.38
Tax-exempt [4]	304,672	8,919	2.93	289,316	8,993	3.11	319,911	9,924	3.10
Certificates of deposit	—	—	—	255	6	2.35	1,573	32	2.03
Short-term investments	614,390	726	0.12	402,427	1,226	0.30	287,289	5,812	2.02
Total interest-earning assets	1,999,609	47,370	2.37	1,674,297	49,576	2.96	1,472,399	54,694	3.71
Non-interest-earning assets									
Cash and due from banks	21,220			16,979			15,455		
Premises and equipment, net	17,846			19,623			21,319		
Payments in excess of funding	211,809			160,692			168,186		
Bank owned life insurance	26,766			17,817			17,489		
Goodwill and other intangibles	17,273			18,132			15,433		
Other assets	51,064			55,586			49,736		
Allowance for credit losses	(11,595)			(11,016)			(10,443)		
Total assets	$2,333,992			$1,952,110			$1,749,574		
Liabilities and Shareholders' Equity [1]									
Interest-bearing liabilities									
Interest-bearing demand deposits	$ 521,409	$ 582	0.11 %	$ 398,585	$ 1,313	0.33 %	$ 311,434	$ 3,686	1.18 %
Savings deposits	18,398	9	0.05	13,819	24	0.17	10,285	103	1.00
Time deposits >=$250	14,576	139	0.95	20,036	267	1.33	17,634	281	1.59
Other time deposits	37,676	441	1.17	47,970	756	1.58	55,490	1,121	2.02
Total interest-bearing deposits	592,059	1,171	0.20	480,410	2,360	0.49	394,843	5,191	1.31
Short-term borrowings	10	—	—	61	2	3.28	61	2	3.28
Total interest-bearing liabilities	592,069	1,171	0.20	480,471	2,362	0.49	394,904	5,193	1.32
Noninterest-bearing liabilities									
Demand deposits	447,880			356,433			276,301		
Accounts and drafts payable	986,572			803,605			785,202		
Other liabilities	54,035			65,513			56,700		
Total liabilities	2,080,556			1,706,022			1,513,107		
Shareholders' equity	253,436			246,088			236,467		
Total liabilities and share-holders' equity	$2,333,992			$1,952,110			$1,749,574		
Net interest income [4]		$ 46,199			$ 47,214			$ 49,501	
Net interest margin [4]			2.31 %			2.82 %			3.36 %
Interest spread			2.17 %			2.47 %			2.39 %

(1) Balances shown are daily averages.

(2) For purposes of these computations, nonaccrual loans are included in the average loan amounts outstanding. Interest on nonaccrual loans is recorded when received as discussed further in Item 8, Note 1 of this report.

(3) Interest income on loans includes net loan fees of $3,412,000, $3,608,000, and $650,000 for 2021, 2020 and 2019, respectively. Loan fees include $2,634,000 and $3,057,000 of PPP loan fees for 2021 and 2020, respectively.

(4) Interest income is presented on a tax-equivalent basis assuming a tax rate of 21%. The tax-equivalent adjustment was approximately $1,873,000, $1,889,000, and $2,085,000 for 2021, 2020 and 2019, respectively.

(5) For purposes of these computations, yields on investment securities are computed as interest income divided by the average amortized cost of the investments.

Analysis of Net Interest Income Changes

The following table presents the changes in interest income and expense between years due to changes in volume and interest rates.

	2021 Over 2020			2020 Over 2019		
(In thousands)	Volume [1]	Rate [1]	Total	Volume[1]	Rate [1]	Total
Increase (decrease) in interest income:						
Loans [2], [3]:	$ (766)	$ (1,721)	$ (2,487)	$ 6,476	$ (5,272)	$ 1,204
Securities:						
Taxable	1,761	(900)	861	(620)	(159)	(779)
Tax-exempt [4]	463	(537)	(74)	(951)	20	(931)
Certificates of deposit	(6)	—	(6)	(30)	4	(26)
Short-term investments	256	(756)	(500)	1,467	(6,053)	(4,586)
Total interest income	$ 1,708	$ (3,914)	$ (2,206)	$ 6,342	$ (11,460)	$ (5,118)
Interest expense on:						
Interest-bearing demand deposits	$ 318	$ (1,049)	$ (731)	$ 828	$ (3,201)	$ (2,373)
Savings deposits	6	(21)	(15)	27	(106)	(79)
Time deposits >=$250	(63)	(65)	(128)	36	(50)	(14)
Other time deposits	(143)	(172)	(315)	(139)	(226)	(365)
Short-term borrowings	(1)	(1)	(2)	—	—	—
Total interest expense	117	(1,308)	(1,191)	752	(3,583)	(2,831)
Net interest income	$ 1,591	$ (2,606)	$ (1,015)	$ 5,590	$ (7,877)	$ (2,287)

(1) The change in interest due to the combined rate/volume variance has been allocated in proportion to the absolute dollar amounts of the change in each.
(2) Average balances include nonaccrual loans.
(3) Interest income includes net loan fees.
(4) Interest income is presented on a tax-equivalent basis assuming a tax rate of 21%.

Loan Portfolio

Interest earned on the loan portfolio is a primary source of income for the Company. The loan portfolio was $960,567,000 representing 38% of the Company's total assets as of December 31, 2021 and generated $35,178,000 in interest income during the year then ended. The following tables show the composition of the loan portfolio at the end of the periods indicated and remaining maturities for loans as of December 31, 2021.

Loans by Type	December 31,		
(In thousands)	2021	2020	2019
Commercial and industrial	$ 450,336	$ 298,984	$ 323,857
Real estate (commercial and faith-based):			
Mortgage	464,341	434,080	407,480
Construction	39,461	48,908	41,244
PPP	6,299	109,704	—
Other	130	—	57
Total loans	$ 960,567	$ 891,676	$ 772,638

Loans by Maturity as of December 31, 2021

(In thousands)	One Year Or Less				Over 1 Year Through 5 Years				Over 5 Years Through 15 Years [(1)]					
	Fixed Rate		Floating Rate		Fixed Rate		Floating Rate		Fixed Rate		Floating Rate		Total	
Commercial and industrial	$	30,378	$	54,011	$	156,084	$	17,035	$	180,234	$	12,594	$	450,336
Real Estate:														
Mortgage		58,516		11,984		302,450		3,503		74,648		13,240		464,341
Construction		14,698		13,337		878		10,548		—		—		39,461
PPP		—		—		6,299		—		—		—		6,299
Other		—		130		—		—		—		—		130
Total loans	$	103,592	$	79,462	$	465,711	$	31,086	$	254,882	$	25,834	$	960,567

(1) The Company did not have any loans with maturities greater than 15 years.

The Company has no concentrations of loans exceeding 10% of total loans, which are not otherwise disclosed in the loan portfolio composition table and as are discussed in Item 8, Note 4, of this report. As can be seen in the loan composition table above and as discussed in Item 8, Note 4, the Company's primary market niche for banking services is privately held businesses, franchise restaurants, and faith-based ministries.

Loans to commercial entities are generally secured by the business assets of the borrower, including accounts receivable, inventory, machinery and equipment, and the real estate from which the borrower operates. Operating lines of credit to these companies generally are secured by accounts receivable and inventory, with specific percentages of each determined on a customer-by-customer basis based on various factors including the type of business. Intermediate term credit for machinery and equipment is generally provided at some percentage of the value of the equipment purchased, depending on the type of machinery or equipment purchased by the entity. Loans secured exclusively by real estate to businesses and faith-based ministries are generally made with a maximum 80% loan to value ratio, depending upon the Company's estimate of the resale value and ability of the property to generate cash. The Company's loan policy requires an independent appraisal for all loans over $500,000 secured by real estate. Company management monitors the local economy in an attempt to determine whether it has had a significant deteriorating effect on such real estate loans. When problems are identified, appraised values are updated on a continual basis, either internally or through an updated external appraisal.

Loans increased $68,891,000, or 8%, during 2021 to $960,567,000 as of December 31, 2021. Franchise restaurant loans, which are included in commercial and industrial loans, increased $100,593,000 or 114%, during 2021 to $189,074,000 as of December 31, 2021. The increase in franchise loans was due to organic growth in an effort to expand this loan type. The Company also experienced organic loan growth in other loan types. These increases were partially offset by the decrease in PPP loans of $103,405,000 from $109,704,000 at December 31, 2020 to $6,299,000 at December 31, 2021. The decrease in PPP loans was due to ongoing forgiveness of these loans by the SBA in 2021. Additional details regarding the types and maturities of loans in the loan portfolio are contained in the tables above and in Item 8, Note 4.

Provision and Allowance for Credit Losses on Loans and Allowance for Unfunded Commitments

The Company recorded a release of credit losses and off-balance sheet credit exposures of $130,000 in 2021 and a provision for credit losses of $810,000 in 2020. The amount of the (release of) provision for credit losses was derived from the Company’s quarterly CECL model. The amount of the provision will fluctuate as determined by these quarterly analyses. The Company had net loan recoveries of $27,000 and $20,000 in 2021 and 2020, respectively. The ACL was $12,041,000 at December 31, 2021 compared to $11,944,000 at December 31, 2020. The ACL represented 1.25% of outstanding loans at December 31, 2021 as compared to 1.34% of outstanding loans at December 31, 2020. The allowance for unfunded commitments was $367,000 at December 31, 2021 and $567,000 at December 31, 2020. There were no nonperforming loans outstanding at December 31, 2021 and December 31, 2020.

The ACL has been established and is maintained to estimate the lifetime credit losses expected in the loan portfolio. An ongoing assessment is performed to determine if the balance is adequate. Charges or credits are made to expense based on changes in the economic forecast, qualitative risk factors, loan volume, and individual loans. For loans that are individually evaluated, the Company uses two impairment measurement methods: 1) the present value of expected future cash flows and 2) collateral value.

Federal and state regulatory agencies review the Company's methodology for maintaining the ACL. These agencies may require the Company to adjust the ACL based on their judgments and interpretations about information available to them at the time of their examinations.

The following schedule summarizes activity in the ACL and the allocation of the allowance to the Company's loan categories.

Summary of Credit Loss Experience

	December 31,				
(In thousands)	**2021**	**2020**	**2019**	**2018**	**2017**
Allowance at beginning of year	$ 11,944	$ 11,279	$ 10,225	$ 10,205	$ 10,175
Loans charged-off:					
Commercial and industrial	—	—	—	—	—
Real estate (commercial and faith-based):					
Mortgage	—	—	—	—	—
Construction	—	—	—	—	—
Other	—	—	—	—	—
Total loans charged-off	—	—	—	—	—
Recoveries of loans previously charged-off:					
Commercial and industrial	12	19	81	20	30
Real estate (commercial and faith-based):					
Mortgage	15	1	—	—	—
Construction	—	—	—	—	—
Other	—	—	—	—	—
Total recoveries of loans previously charged-off	27	20	81	20	30
Net loans recovered	(27)	(20)	(81)	(20)	(30)
Provision for credit losses	70	645	250	—	—
Allowance at end of year	$ 12,041	$ 11,944	$ 10,556	$ 10,225	$ 10,205
Cumulative effect of accounting change (ASU 2016-13)	—	—	723	—	—
Allowance at beginning of next year	$ 12,041	$ 11,944	$ 11,279	$ 10,225	$ 10,205
Allowance for unfunded commitments at beginning of year	$ 567	$ 402	$ —	$ —	$ —
(Release of) provision for credit losses	(200)	165	—	—	—
Allowance for unfunded commitments at end of year	367	567	—	—	—
Cumulative effect of accounting change (ASU 2016-13)	—	—	402	—	—
Allowance for unfunded commitments at beginning of next year	$ 367	$ 567	$ 402	$ —	$ —
Loans outstanding:					
Average	$ 887,662	$ 906,631	$ 760,153	$ 710,846	$ 663,653
December 31	960,567	891,676	772,638	721,587	686,231
Ratio of allowance for credit losses to loans outstanding:					

Average	1.36 %	1.32 %	1.39 %	1.44 %	1.54 %
December 31	1.25 %	1.34 %	1.37 %	1.42 %	1.49 %
Ratio of net recoveries to average loans outstanding	—	—	(.01)%	—	—
Allocation of allowance for credit losses [(1)]:					
Commercial and industrial	$ 5,035	$ 4,635	$ 4,874	$ 4,179	$ 3,652
Real estate (commercial and faith-based):					
Mortgage	6,714	6,892	5,370	5,378	5,356
Construction	292	417	312	244	266
Other	—	—	—	424	931
Total	$ 12,041	$ 11,944	$ 10,556	$ 10,225	$ 10,205

Percentage of categories to total loans:					
Commercial and industrial	46.9 %	33.5 %	41.9 %	38.4 %	34.4 %
Real estate (commercial and faith-based):					
Mortgage	48.3 %	48.7 %	52.8 %	57.1 %	59.9 %
Construction	4.1 %	5.5 %	5.3 %	4.5 %	5.1 %
PPP	0.7 %	12.3 %	— %	— %	— %
Other	— %	— %	— %	— %	0.6 %
Total	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %

(1) Although specific allocations exist, the entire allowance is available to absorb losses in any particular loan category.

Nonperforming Assets

Nonperforming loans are defined as loans on non-accrual status and loans 90 days or more past due but still accruing. Nonperforming assets include nonperforming loans plus foreclosed real estate. Troubled debt restructurings are not included in nonperforming loans unless they are on non-accrual status or past due 90 days or more.

It is the policy of the Company to continually monitor its loan portfolio and to discontinue the accrual of interest on any loan for which collection is not probable. Subsequent payments received on such loans are applied to principal if collection of principal is not probable; otherwise, these receipts are recorded as interest income. There was no interest income recognized on nonaccrual loans for the years ended 2021 and 2020.

There were no nonaccrual loans or foreclosed assets at December 31, 2021 or December 31, 2020.

The Company does not have any foreign loans. The Company's loan portfolio does not include a significant amount of single family real estate mortgages, as the Company does not market its services to retail customers. Also, the Company had no sub-prime mortgage loans or residential development loans in its portfolio in any of the years presented.

The Company does not have any other interest-earning assets which would have been included in nonaccrual, past due or restructured loans if such assets were loans.

Summary of Nonperforming Assets

(In thousands)	December 31, 2021	2020	2019	2018	2017
Commercial and industrial:					
Nonaccrual	$ —	$ —	$ —	$ —	$ —
Contractually past due 90 days or more and still accruing	—	—	—	—	—
Real estate – mortgage:					
Nonaccrual	—	—	—	—	—
Contractually past due 90 days or more and still accruing	—	—	—	—	—
Total nonperforming loans	$ —	$ —	$ —	$ —	$ —
Total foreclosed assets	—	—	—	—	—
Total nonperforming assets	$ —	$ —	$ —	$ —	$ —

Operating Expenses

Operating expenses in 2021 compared to 2020 and 2019 include the following significant pre-tax components:

(In thousands)	December 31, 2021	2020	2019
Personnel	$ 92,155	$ 88,062	$ 91,083
Occupancy	3,824	3,739	3,918
Equipment	6,745	6,568	6,140
Amortization of intangible assets	859	859	563
Other operating	16,743	15,387	18,065
Total operating expense	$ 120,326	$ 114,615	$ 119,769

Personnel expense increased $4,093,000, or 5%, to $92,155,000 as a result of: a) an increase in 401(k) match expense of $1,980,000 due to the increase in Company 401(k) match as a result of the freezing of the defined benefit pension plan in February 2021; b) an increase in base salaries and other benefits (i.e. payroll taxes) due to the increase in transaction volume in 2021 as compared to 2020 along with general salary increases; and c) an increase in profit sharing of $773,000 associated with the corresponding increase in net income. These increases were partially offset by a reduction in cost associated with the Company's defined benefit pension plan of $5,918,000 due to the freezing of the plan in February 2021.

Other operating expense increased $1,356,000, or 9%, to $16,743,000 as a result of: a) an increase in business development expense; b) an increase in data processing and other outside service charges related to increased payment volumes; and c) an increase in employee procurement expense. These increases were partially offset by a decrease in professional fees as a result of the hiring of a General Counsel in late 2020 and an associated decrease in outside legal fees.

Income Tax Expense

Income tax expense in 2021 totaled $5,217,000, compared to $5,165,000 in 2020. When measured as a percent of pre-tax income, the Company’s effective tax rate was 15.4% and 17.0% in 2021 and 2020, respectively. The decrease in the effective tax rate in 2021 compared to 2020 was primarily due to changes in the levels of tax credits, tax-free interest income on municipal securities, income on bank-owned life insurance and other miscellaneous book to tax true-ups upon filing of the Company's tax returns for the years ended December 31, 2020 and 2019.

Investment Portfolio

Investment securities increased $315,727,000, or 88%, during 2021 to $673,453,000 at December 31, 2021. State and political subdivision securities increased $65,154,000, or 21%, to $371,128,000. Mortgage-backed securities increased $116,894,000, or 226%, to $168,646,000. The Company also purchased corporate bonds and asset-backed securities throughout 2021 in an effort to invest liquidity and increase the yield on interest-earning assets. The investment portfolio provides the Company with a significant source of earnings, secondary source of liquidity, and mechanisms to manage the effects of changes in loan demand and interest rates. Therefore, the size, asset allocation and maturity distribution of the investment portfolio will vary over time depending on management's assessment of current and future interest rates, changes in loan demand, changes in the Company's sources of funds and the economic outlook. During 2021, the Company's purchase of investment securities totaled $494,226,000.

There was no single issuer of securities in the investment portfolio at December 31, 2021 for which the aggregate amortized cost exceeded 10% of total shareholders' equity.

Investments by Type

	December 31,		
(In thousands)	2021	2020	2019
State and political subdivisions	$ 371,128	$ 305,974	$ 324,447
Mortgage-backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	168,646	51,752	97,718
Corporate bonds	84,338	—	—
Asset-backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	49,341	—	—
Certificates of deposit	—	—	500
Total investments	$ 673,453	$ 357,726	$ 422,665

Investment Securities by Maturity

(At December 31, 2021)

(In thousands)	Within 1 Year	Over 1 to 5 Years	Over 5 to 10 Years	Over 10 Years	Yield
State and political subdivisions	$ 24,168	$ 109,064	$ 137,986	$ 99,910	2.59 % (1)
Mortgage-backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	43	238	24,764	143,601	1.39 %
Corporate bonds	—	13,027	68,392	2,919	1.63 %
Asset-backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	—	—	—	49,341	0.65 %
Total investments	$ 24,211	$ 122,329	$ 231,142	$ 295,771	2.01 %
Weighted average yield (1)	2.95 %	2.92 %	2.92 %	1.39 %	2.01 %

(1) Yields are presented on a tax-equivalent basis assuming a tax rate of 21% for 2021, 2020 and 2019.

Deposits and Accounts and Drafts Payable

Noninterest-bearing demand deposits increased 18% to $582,642,000 at December 31, 2021. Interest-bearing deposits increased $81,509,000, or 15%, to $638,861,000 at December 31, 2021. These balances increased considerably in 2021 as governmental stimulus programs and an increase in integrated payments activity boosted deposit balances.

Accounts and drafts payable generated by the Company in its payment processing operations increased $215,010,000, or 26%, to $1,050,396,000 at December 31, 2021. This increase was primarily the result of a significant increase in dollar volumes processed in transportation due to excess shipping miles in the freight network due to supply chain disruptions, fuel surcharges, and scarcity of carrier supply, among other factors. An increase in dollar volumes in expense management driven by far fewer pandemic-related restrictions imposed on the restaurant, retail and hospitality sectors as compared to 2020 also contributed to the increase. Due to the Company's payment processing cycle, average balances are much more indicative of the underlying activity than period-end balances since point-in-time comparisons can be misleading if the comparison dates fall on different days of the week. Average accounts and drafts payable increased $182,967,000, or 23% to $986,572,000 during 2021.

The composition of average deposits and the average rates paid on those deposits is represented in the table entitled "Distribution of Assets, Liabilities and Shareholders' Equity; Interest Rate and Interest Differential" which is included earlier in this discussion. The Company does not have any significant deposits from foreign depositors.

Maturities of Certificates of Deposit as of December 31, 2021

(In thousands)	**$100 or Less**	**$100 to Less Than $250**	**$250 or More**	**Total**
Three months or less	$ 761	$ 14,975	$ 3,224	$ 18,960
Three to six months	681	1,340	1,483	3,504
Six to twelve months	617	5,472	2,302	8,391
Over twelve months	1,477	8,861	5,991	16,329
Total	$ 3,536	$ 30,648	$ 13,000	$ 47,184

Liquidity

The discipline of liquidity management as practiced by the Company seeks to ensure that funds are available to fulfill all payment obligations relating to invoices processed as they become due and meet depositor withdrawal requests and borrower credit demands while at the same time maximizing profitability. This is accomplished by balancing changes in demand for funds with changes in supply of funds. Primary liquidity to meet demand is provided by short-term liquid assets that can be converted to cash, maturing securities and the ability to obtain funds from external sources. The Company's Asset/Liability Committee ("ALCO") has direct oversight responsibility for the Company's liquidity position and profile. Management considers both on-balance sheet and off-balance sheet items in its evaluation of liquidity.

The balances of liquid assets consist of cash and cash equivalents, which include cash and due from banks, interest-bearing deposits in other financial institutions, federal funds sold, and money market funds, totaled $514,928,000 at December 31, 2021, a decrease of $155,600,000, or 23%, from December 31, 2020. The decrease during 2021 is primarily attributed to the funds being used for purchases of available-for-sale investment securities. At December 31, 2021, cash and cash equivalents represented 20% of total assets and are the Company's and its subsidiaries' primary source of liquidity to meet future expected and unexpected loan demand, depositor withdrawals or reductions in accounts and drafts payable.

Secondary sources of liquidity include the investment portfolio and borrowing lines. Total investment securities available-for-sale at fair value were $673,453,000 at December 31, 2021, an increase of $315,727,000, or 88%, from December 31, 2020. Investment securities represented 26% of total assets at December 31, 2021. Of the total portfolio, 4% mature in one year or less, 18% mature after one year through five years and 78% mature after five years.

As of December 31, 2021, the Bank had unsecured lines of credit at six correspondent banks to purchase federal funds up to a maximum of $83,000,000 in aggregate. As of December 31, 2021, the Bank had secured lines of credit with the Federal Home Loan Bank of $228,849,000 collateralized by commercial mortgage loans. At December 31, 2021, the Company had lines of credit from two banks up to a maximum of $150,000,000 in aggregate collateralized by state and political subdivision securities. There were no amounts outstanding at December 31, 2021, and 2020 under any of the lines of credit.

The deposits of the Company's banking subsidiary have historically been stable, consisting of a sizable volume of core deposits related to customers that utilize many other commercial products of the Bank. The accounts and drafts payable generated by the Company have also historically been a stable source of funds.

Net cash flows provided by operating activities for the years 2021, 2020 and 2019 were $34,547,000, $47,781,000, and $42,126,000, respectively. Net income plus depreciation and amortization accounts for most of the operating cash provided. Net cash flows from investing and financing activities fluctuate greatly as the Company actively manages its investment and loan portfolios and customer activity influences changes in deposit and accounts and drafts payable balances. Further analysis of the changes in these account balances is discussed earlier in this report. Due to the daily fluctuations in these account balances, management believes that the analysis of changes in average balances, also discussed earlier in this report, can be more indicative of underlying activity than the period-end balances used in the statements of cash flows. Management anticipates that cash and cash equivalents, maturing investments, cash from operations, and borrowing lines will continue to be sufficient to fund the Company's operations and capital expenditures in 2022. The Company anticipates the annual capital expenditures for 2022 should range from $8 million to $10 million. Capital expenditures in 2022 are expected to consist of equipment and software related to the payment and information processing services business.

There are several trends and uncertainties that may impact the Company's ability to generate revenues and income at the levels that it has in the past. In addition, these trends and uncertainties may impact available liquidity. Those that could significantly impact the Company include the general levels of interest rates, business activity, and energy costs as well as new business opportunities available to the Company.

As a financial institution, a significant source of the Company's earnings is generated from net interest income. Therefore, the prevailing interest rate environment is important to the Company's performance. A major portion of the Company's funding sources are the noninterest-bearing accounts and drafts payable generated from its payment and information processing services. Accordingly, higher levels of interest rates will generally allow the Company to earn more net interest income. Conversely, a lower interest rate environment will generally tend to depress net interest income. The Company actively manages its balance sheet in an effort to maximize net interest income as the interest rate environment changes. This balance sheet management impacts the mix of earning assets maintained by the Company at any point in time. For example, in a low interest rate environment, short-term relatively lower rate liquid investments may be reduced in favor of longer term relatively higher yielding investments and loans. If the primary source of liquidity is reduced in a low interest rate environment, a greater reliance would be placed on secondary sources of liquidity including borrowing lines, the ability of the Bank to generate deposits, and the investment portfolio to ensure overall liquidity remains at acceptable levels.

The overall level of economic activity can have a significant impact on the Company's ability to generate revenues and income, as the volume and size of customer invoices processed may increase or decrease. Lower levels of economic activity decrease both fee income (as fewer invoices are processed) and balances of accounts and drafts payable generated (as fewer invoices are processed) from the Company's transportation customers.

The relative level of energy costs can impact the Company's earnings and available liquidity. Lower levels of energy costs will tend to decrease transportation and energy invoice amounts resulting in a corresponding decrease in accounts and drafts payable. Decreases in accounts and drafts payable generate lower interest income and reduce liquidity.

New business opportunities are an important component of the Company's strategy to grow earnings and improve performance. Generating new customers allows the Company to leverage existing systems and facilities and grow revenues faster than expenses. During 2021, new business was added in both the transportation and facility expense management operations, driven by both successful marketing efforts and the solid market leadership position held by Cass.

Capital Resources

One of management's primary objectives is to maintain a strong capital base to warrant the confidence of customers, shareholders, and bank regulatory agencies. A strong capital base is needed to take advantage of profitable growth opportunities that arise and to provide assurance to depositors and creditors. The Company and its banking subsidiary continue to exceed all regulatory capital requirements, as evidenced by the capital ratios at December 31, 2021 as shown in Item 8, Note 2 of this report.

In 2021, cash dividends paid were $15,446,000, a decrease of $153,000, or 1%, compared to $15,599,000 in 2020. The decrease is attributable to the amount of shares repurchased, partially offset by the increase to the per-share amount paid during the fourth quarter of 2021.

Shareholders' equity was $245,798,000, or 10% of total assets, at December 31, 2021, a decrease of $15,362,000 as compared to December 31, 2020. The decrease was primarily a result of the repurchase of treasury shares of $30,997,000 and the payment of cash dividends of $15,446,000, partially offset by net income of $28,604,000.

Dividends from the Bank are a source of funds for payment of dividends by the Company to its shareholders. The only restrictions on dividends are those dictated by regulatory capital requirements, state corporate laws and prudent and sound banking principles. During 2021, the Bank paid a dividend of $15,000,000 to the Company. As of December 31, 2021, unappropriated retained earnings of $34,976,000 were available at the Bank for the declaration of dividends to the Company without prior approval from regulatory authorities.

The Company maintains a treasury stock buyback program approved by the Board of Directors in October 2021 pursuant to which the Board of Directors has authorized the repurchase of up to 750,000 shares of the Company's common stock and has no expiration date. During the three months ended December 31, 2021, the Company repurchased a total of 278,919 shares of its common stock pursuant to its treasury stock buyback program. As such, 471,081 shares remain under the buyback program at December 31, 2021.

The Company repurchased a total of 713,857 shares at an aggregate cost of $30,997,000 during the year ended December 31, 2021 and 162,901 shares at an aggregate cost of $6,825,000 during the year ended December 31, 2020. A portion of the repurchased shares may be used for the Company's employee benefit plans, and the balance will be available for other general corporate purposes. The pace of future repurchase activity will depend on factors such as levels of regulatory capital, cash generation from operations, cash requirements for investments, repayment of debt, current stock price, business and market conditions, and other factors. The Company may repurchase shares from time to time on the open market or in private transactions, including structured transactions. The stock repurchase program may be modified or discontinued at any time.

Impact of Inflation

Inflation could have the impact of increasing our operating expenses, such as compensation expense. Inflationary pressures may also have an impact on total assets, earnings and capital, which could impact the Company's ability to grow. During 2021, supply chain disruption and inflation, among other factors, had the impact of increasing the average balance of accounts and drafts payable and total assets. An increase in total assets could have the impact of decreasing our regulatory capital ratios if earnings and total regulatory capital do not increase at the same rate. As a result of rising inflation, in December 2021, the Federal Reserve released projections related to the target range for the Federal Funds rate that imply varied increases in the rate over the next few years. There can be no assurance that any increases in the Federal Funds rate will occur, and the Company continues to monitor these developments.

Commitments, Contractual Obligations and Off-Balance Sheet Arrangements

In the normal course of business, the Company is party to activities that involve credit, market and operational risk that are not reflected in whole or in part in the Company's consolidated financial statements. Such activities include traditional off-balance sheet credit-related financial instruments. These financial instruments include commitments to extend credit, commercial letters of credit and standby letters of credit. The Company's maximum potential exposure to credit loss in the event of nonperformance by the other party to the financial instrument for commitments to extend credit, commercial letters of credit and standby letters of credit is represented by the contractual amounts of those instruments. At December 31, 2021, an allowance for unfunded commitments of $367,000 had been recorded. See Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations—Provision and Allowance for Credit Losses and Unfunded Commitments"

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Commercial and standby letters of credit are commitments issued by the Company or its subsidiaries to guarantee the performance of a customer to a third party. These off-balance sheet financial instruments generally have fixed expiration dates or other termination clauses and may require payment of a fee. At December 31, 2021, the balance of loan commitments, standby and commercial letters of credit were $208,395,000, $12,859,000 and $771,000, respectively. Since some of the financial instruments may expire without being drawn upon, the total amounts do not necessarily represent future cash requirements. Commitments to extend credit and letters of credit are subject to the same underwriting standards as those financial instruments included on the consolidated balance sheets. The Company evaluates each customer's credit worthiness on a case-by-case basis. The amount of collateral obtained, if deemed necessary upon extension of the credit, is based on management's credit evaluation of the borrower. Collateral held varies, but is generally accounts receivable, inventory, residential or income-producing commercial property or equipment. In the event of nonperformance, the Company or its subsidiaries may obtain and liquidate the collateral to recover amounts paid under its guarantees on these financial instruments. See Note 14 – Disclosures about Fair Value of Financial Instruments for more information.

During 2021, the Company made a contribution of $330,000 to its noncontributory defined benefit pension plan. In determining pension expense, the Company makes several assumptions, including the discount rate and long-term rate of return on assets. These assumptions are determined at the beginning of the plan year based on interest rate levels and financial market performance.

For 2021, these assumptions were as follows:

Assumption	**Rate**
Weighted average discount rate	2.55 %
Rate of increase in compensation levels	(a)
Expected long-term rate of return on assets	6.00 %

(a) 6.00% graded down to 3.25% over the first seven years of service.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Interest Rate Sensitivity

The Company faces market risk to the extent that its net interest income is affected by changes in market interest rates. The asset/liability management discipline as applied by the Company seeks to limit the volatility, to the extent possible, that can result from changes in market interest rates. This is accomplished by limiting the concentration of maturities of fixed rate investments, loans, and deposits; matching fixed rate assets and liabilities to the extent possible; and optimizing the mix of fees and net interest income. However the Company's asset/liability position often differs from other financial holding companies with positive cumulative "gaps." This asset sensitive position is caused primarily by the operations of the Company, which generate large balances of accounts and drafts payable. These balances, which are noninterest bearing, can cause the Company to become susceptible to changes in interest rates, with a decreasing net interest margin in periods of declining interest rates, like the Company is currently experiencing, and an increasing net interest margin in periods of rising interest rates.

The Company’s ALCO measures the Company's interest rate risk sensitivity on a quarterly basis to monitor and manage the variability of earnings in various interest rate environments. The ALCO evaluates the Company's risk position to determine whether the level of exposure is significant enough to hedge a potential decline in earnings or whether the Company can safely increase risk to enhance returns. The ALCO uses gap reports, 12-month net interest income simulations, and fair market value of equity analyses as its main analytical tools to provide management with insight into the Company's exposure to changing interest rates.

Management uses a gap report to review any significant mismatch between the re-pricing points of the Company’s rate sensitive assets and liabilities in certain time horizons. A negative gap indicates that more liabilities re-price in that particular time frame and, if rates rise, these liabilities will re-price faster than the assets. A positive gap would indicate the opposite. Gap reports can be misleading in that they capture only the re-pricing timing within the balance sheet, and fail to capture other significant risks such as basis risk and embedded options risk. Basis risk involves the potential for the spread relationship between rates to change under different rate environments and embedded options risk relates to the potential for the alteration of the level and/or timing of cash flows given changes in rates.

Another measurement tool used by management is net interest income simulation, which forecasts net interest income during the coming 12 months under different interest rate scenarios. Management has set policy limits specifying acceptable levels of interest rate risk given multiple simulated rate movements. These simulations are more informative than gap reports because they are able to capture more of the dynamics within the balance sheet, such as basis risk and embedded options risk. A table containing simulation results as of December 31, 2021, from an immediate and sustained parallel change in interest rates in three varying scenarios is shown below.

While net interest income simulations do an adequate job of capturing interest rate risk to short term earnings, they do not capture risk within the current balance sheet beyond 12 months. The Company uses fair market value of equity analyses to help identify longer-term risk that may reside on the current balance sheet. The fair market value of equity is represented by the present value of all future income streams generated by the current balance sheet. The Company measures the fair market value of equity as the net present value of all asset and liability cash flows discounted at forward rates suggested by the current U.S. Treasury curve plus appropriate credit spreads. This representation of the change in the fair market value of equity under different rate scenarios gives insight into the magnitude of risk to future earnings due to rate changes. Management has set policy limits relating to declines in the market value of equity.

The table below illustrates the projected impact of interest rate shocks on net interest income as of December 31, 2021:

Change in Interest Rates	% Change in Net Interest Income
+200 basis points	24%
+100 basis points	12%
-100 basis points	(3%)

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

CASS INFORMATION SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS

	December 31,	
(In thousands except share and per share data)	**2021**	**2020**
Assets		
Cash and due from banks	$ 12,301	$ 30,985
Short-term investments	502,627	639,543
Cash and cash equivalents	514,928	670,528
Securities available-for-sale, at fair value	673,453	357,726
Loans	960,567	891,676
Less allowance for credit losses	12,041	11,944
Loans, net	948,526	879,732
Payments in advance of funding	291,427	194,563
Premises and equipment, net	18,113	18,057
Investments in bank-owned life insurance	43,176	18,058
Goodwill	14,262	14,262
Other intangible assets, net	2,564	3,423
Other assets	48,452	46,886
Total assets	$ 2,554,901	$ 2,203,235
Liabilities and Shareholders' Equity		
Liabilities:		
Deposits		
Noninterest-bearing	$ 582,642	$ 493,504
Interest-bearing	638,861	557,352
Total deposits	1,221,503	1,050,856
Accounts and drafts payable	1,050,396	835,386
Other liabilities	37,204	55,833
Total liabilities	2,309,103	1,942,075
Shareholders' Equity:		
Preferred stock, par value $.50 per share; 2,000,000 shares authorized and no shares issued	—	—
Common stock, par value $.50 per share; 40,000,000 shares authorized; 15,505,772 shares issued at December 31, 2021 and 2020; 13,734,295 and 14,392,669 shares outstanding at December 31, 2021 and 2020, respectively.	7,753	7,753
Additional paid-in capital	204,276	204,875
Retained earnings	112,220	99,062
Common shares in treasury, at cost (1,771,477 and 1,113,103 shares at December 31, 2021 and 2020, respectively)	(78,904)	(50,515)
Accumulated other comprehensive income (loss)	453	(15)
Total shareholders' equity	245,798	261,160
Total liabilities and shareholders' equity	$ 2,554,901	$ 2,203,235

See accompanying notes to consolidated financial statements.

CASS INFORMATION SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF INCOME

	For the Years Ended December 31,		
(In thousands except per share data)	2021	2020	2019
Fee Revenue and Other Income:			
Information services payment and processing revenue	$ 106,455	$ 97,204	$ 107,953
Bank service fees	2,239	1,704	1,386
Gains on sales of securities	51	1,075	19
Other	946	458	711
Total fee revenue and other income	109,691	100,441	110,069
Interest Income:			
Interest and fees on loans	35,178	37,665	36,461
Interest and dividends on securities:			
Taxable	2,547	1,692	2,497
Exempt from federal income taxes	7,046	7,104	7,839
Interest on federal funds sold and other short-term investments	726	1,226	5,812
Total interest income	45,497	47,687	52,609
Interest Expense:			
Interest on deposits	1,171	2,360	5,191
Interest on short-term borrowings	—	2	2
Total interest expense	1,171	2,362	5,193
Net interest income	44,326	45,325	47,416
(Release of) provision for credit losses	(130)	810	250
Net interest income after (release of) provision for credit losses	44,456	44,515	47,166
Total net revenue	154,147	144,956	157,235
Operating Expense:			
Personnel	92,155	88,062	91,083
Occupancy	3,824	3,739	3,918
Equipment	6,745	6,568	6,140
Amortization of intangible assets	859	859	563
Other operating	16,743	15,387	18,065
Total operating expense	120,326	114,615	119,769
Income before income tax expense	33,821	30,341	37,466
Income tax expense	5,217	5,165	7,062
Net income	$ 28,604	$ 25,176	$ 30,404
Basic Earnings Per Share	$ 2.03	$ 1.75	$ 2.11
Diluted Earnings Per Share	2.00	1.73	2.07

See accompanying notes to consolidated financial statements.

CASS INFORMATION SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

(In thousands)	For the Years Ended December 31, 2021	2020	2019
Comprehensive Income:			
Net income	$ 28,604	$ 25,176	$ 30,404
Other comprehensive income (loss):			
Net unrealized (loss) gain on securities available-for-sale	(10,447)	6,689	13,429
Tax effect	2,487	(1,592)	(3,196)
Reclassification adjustments for gains included in net income	(51)	(1,075)	(19)
Tax effect	12	256	5
FASB ASC 715 pension adjustment	11,363	12,548	(6,903)
Tax effect	(2,705)	(2,987)	1,643
Foreign currency translation adjustments	(191)	66	(7)
Other comprehensive income	468	13,905	4,952
Total comprehensive income	$ 29,072	$ 39,081	$ 35,356

See accompanying notes to consolidated financial statements.

CASS INFORMATION SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)	For the Years Ended December 31, 2021	2020	2019
Cash Flows From Operating Activities:			
Net income	$ 28,604	$ 25,176	$ 30,404
Adjustments to reconcile net income to net cash provided by operating activities:			
Amortization of intangible assets	859	859	563
Net amortization of premium/discount on investment securities	7,328	5,939	6,149
Depreciation	4,313	4,471	4,227
Gains on sales of securities	(51)	(1,075)	(19)
Stock-based compensation expense	2,859	2,267	3,144
(Release of) provision for credit losses	(130)	810	250
Deferred income tax (benefit) expense	(698)	(874)	1,247
Increase (decrease) in current income tax liability	206	1,237	(1,838)
(Decrease) increase in pension liability	(1,811)	4,423	(1,916)
(Increase) decrease in accounts receivable	(602)	756	988
Other operating activities, net	(6,330)	3,792	(1,073)
Net cash provided by operating activities	34,547	47,781	42,126
Cash Flows From Investing Activities:			
Proceeds from sales of securities available-for-sale	63,774	21,943	4,648
Proceeds from maturities of securities available-for-sale	96,951	63,789	21,502
Purchases of securities available-for-sale	(494,226)	(20,043)	—
Net increase in loans	(68,664)	(119,183)	(50,970)
Purchase of bank-owned life insurance	(25,119)	—	—
(Increase) decrease in payments in advance of funding	(96,864)	11,595	(45,381)
Purchases of premises and equipment, net	(4,369)	(2,001)	(2,723)
Asset acquisition of Gateway Giving, LLC	—	—	(2,833)
Net cash used in investing activities	(528,517)	(43,900)	(75,757)
Cash Flows From Financing Activities:			
Net increase in noninterest-bearing demand deposits	89,138	142,413	37,833
Net increase (decrease) in interest-bearing demand and savings deposits	90,310	166,289	(1,133)
Net decrease in time deposits	(8,801)	(14,982)	(1,490)
Net increase (decrease) in accounts and drafts payable	215,016	210,495	(22,400)
Net (decrease) increase in short-term borrowings	—	(18,000)	18,000
Cash dividends paid	(15,446)	(15,599)	(15,234)
Purchase of common shares for treasury	(30,997)	(6,825)	(7,799)
Other financing activities, net	(850)	(1,098)	(1,125)
Net cash provided by financing activities	338,370	462,693	6,652
Net (decrease) increase in cash and cash equivalents	(155,600)	466,574	(26,979)
Cash and cash equivalents at beginning of year	670,528	203,954	230,933
Cash and cash equivalents at end of year	$ 514,928	$ 670,528	$ 203,954
Supplemental information:			
Cash paid for interest	$ 1,194	$ 2,426	$ 5,181
Cash paid for income taxes	5,637	4,732	7,604

See accompanying notes to consolidated financial statements.

CASS INFORMATION SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In thousands except per share data)	Common Stock	Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total
Balance, December 31, 2018	$ 7,753	$ 205,770	$ 75,171	$ (39,974)	$ (18,872)	$ 229,848
Net income			30,404			30,404
Cash dividends ($1.05 per share)			(15,234)			(15,234)
Issuance of 34,810 common shares pursuant to stock-based compensation plan, net		(1,417)		1,358		(59)
Exercise of SARs		(2,100)		1,034		(1,066)
Stock-based compensation expense		3,144				3,144
Purchase of 154,593 common shares				(7,799)		(7,799)
Other comprehensive loss					4,952	4,952
Balance, December 31, 2019	$ 7,753	$ 205,397	$ 90,341	$ (45,381)	$ (13,920)	$ 244,190
Cumulative effect of accounting change (ASU 2016-13), net of tax			(856)			(856)
Balance, January 1, 2020	$ 7,753	$ 205,397	$ 89,485	$ (45,381)	$ (13,920)	$ 243,334
Net income			25,176			25,176
Cash dividends ($1.08 per share)			(15,599)			(15,599)
Issuance of 72,448 common shares pursuant to stock-based compensation plan, net		(2,546)		1,550		(996)
Exercise of SARs		(243)		141		(102)
Stock-based compensation expense		2,267				2,267
Purchase of 162,901 common shares				(6,825)		(6,825)
Other comprehensive income					13,905	13,905
Balance, December 31, 2020	$ 7,753	$ 204,875	$ 99,062	$ (50,515)	$ (15)	$ 261,160
Net income			28,604			28,604
Cash dividends ($1.09 per share)			(15,446)			(15,446)
Issuance of 85,056 common shares pursuant to stock-based compensation plan, net		(2,939)		2,249		(690)
Exercise of SARs		(519)		359		(160)
Stock-based compensation expense		2,859				2,859
Purchase of 713,857 common shares				(30,997)		(30,997)
Other comprehensive income					468	468
Balance, December 31, 2021	$ 7,753	$ 204,276	$ 112,220	$ (78,904)	$ 453	$ 245,798

See accompanying notes to consolidated financial statements.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

Note 1
Summary of Significant Accounting Policies

Summary of Operations The Company provides payment and information services, which include processing and payment of transportation, energy, telecommunications and environmental invoices. These services include the acquisition and management of data, information delivery and financial exchange. The consolidated balance sheet captions, "Accounts and drafts payable" and "Payments in advance of funding," represent the Company's resulting financial position related to the payment services that are performed for customers. The Company also provides a full range of banking services to individual, corporate and institutional customers through the Bank, its wholly owned bank subsidiary.

Basis of Presentation The accounting and reporting policies of the Company and its subsidiaries conform to U.S. GAAP. The consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries after elimination of intercompany transactions. Certain amounts in the 2020 and 2019 consolidated financial statements have been reclassified to conform to the 2021 presentation. Such reclassifications have no effect on previously reported net income or shareholders' equity.

Use of Estimates In preparing the consolidated financial statements, Company management is required to make estimates and assumptions which significantly affect the reported amounts in the consolidated financial statements.

Cash and Cash Equivalents For purposes of the consolidated statements of cash flows, the Company considers cash and due from banks, interest-bearing deposits in other financial institutions, and federal funds sold and other short-term investments to be cash and cash equivalents.

Investment in Debt Securities The Company classifies its investment securities as available-for-sale. Securities classified as available-for-sale are carried at fair value. Unrealized gains and losses, net of the related tax effect, are excluded from earnings and reported in accumulated other comprehensive income, a component of shareholders' equity. Securities are periodically evaluated for credit losses in accordance with the guidance provided in FASB ASC Topic 326, *Financial Instruments – Credit Losses*.

For available for sale investment securities in an unrealized loss position, the entire loss in fair value is required to be recognized in current earnings if the Company intends to sell the securities or believes it likely that it will be required to sell the security before the anticipated recovery. If neither condition is met, and the Company does not expect to recover the amortized cost basis, the Company determines whether the decline in fair value resulted from credit losses or other factors. If the assessment indicates that a credit loss exists, the present value of cash flows expected to be collected is compared to the amortized cost basis of the security. If the present value of cash flows expected to be collected is less than the amortized cost basis, a credit loss has occurred, and an allowance for credit losses is recorded. The allowance for credit losses is limited by the amount that the fair value is less than the amortized cost basis. Any impairment not recorded through the provision for credit losses would be recognized in other comprehensive income.

Changes in the allowance for credit losses would be recorded as a provision for credit losses on the consolidated statements of income. Losses would be charged against the allowance for credit losses on securities when management believes the uncollectibility of an available-for-sale security is confirmed or when either of the conditions regarding intent or requirement to sell is met.

Prior to the adoption of Accounting Standards Update ("ASU") 2016-13, *Financial Instruments – Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13") as of January 1, 2020, the Company evaluated a decline in the fair value of any available-for-sale security below cost to determine whether the decline was deemed other than temporary and, if so, would result in a charge to earnings and the establishment of a new cost basis for the security. To determine whether impairment was other than temporary, the Company considered guidance provided in the FASB ASC Topic 320, *Investments – Debt and Equity Securities*. When determining whether a debt security was other-than-temporarily impaired, the Company assessed whether it had the intent to sell the security and whether it was more likely than not that the Company would be required to sell prior to recovery of the amortized cost basis. Evidence considered in this assessment included the reasons for impairment, the severity and duration of the impairment, changes in value subsequent to year-end and forecasted performance of the investee.

Premiums and discounts are amortized or accreted to interest income over the expected lives of the respective securities using the level-yield method. Interest income is recognized when earned. Gains and losses are calculated using the specific identification method.

Loans Interest on loans is recognized based upon the principal amounts outstanding. It is the Company's policy to discontinue the accrual of interest when there is reasonable doubt as to the collectability of principal or interest. Subsequent payments received on such loans are applied to principal if there is any doubt as to the collectability of such principal; otherwise, these receipts are recorded as interest income. The accrual of interest on a loan is resumed when the loan is current as to payment of both principal and interest and/or the borrower demonstrates the ability to pay and remain current. Loan origination and commitment fees on originated loans, net of certain direct loan origination costs, are deferred and amortized to interest income using the level-yield method over the estimated lives of the related loans.

Allowance for Credit Losses The ACL is increased by provisions charged to expense and is available to absorb charge-offs, net of recoveries. Management utilizes a systematic, documented approach in determining the appropriate level of the ACL. Management's approach provides for estimated current expected credit losses on loans in accordance with ASU 2016-13. These estimates are based upon a number of factors, such as payment history, financial condition of the borrower, expected future cash flows and collateral exposure.

The ACL is a valuation account that is deducted from the amortized cost basis to present the net amount expected to be collected on the loans. Loans are charged off against the ACL when management believes the uncollectibility of a loan balance is confirmed. Expected recoveries for amounts previously charged off and expected to be charged off do not exceed the aggregate of amounts previously charged off and expected to be charged off.

Management estimated the allowance balance using relevant available information from internal and external sources, relating to past events, current conditions and reasonable and supportable forecasts based on economic factors, such as GDP. Historical credit loss experience, of both the Company and similar peer banks, provides the basis for the estimation of expected credit losses. Adjustments to historical loss information are made for lending management experience, concentration risk, asset quality trends, borrower's ability to pay, collateral, and other environmental factors. It is difficult to estimate how potential changes in any one economic factor or input might affect the overall ACL because a wide variety of factors and inputs are considered in estimating the allowance and changes in those factors and inputs considered may not occur at the same rate and may not be consistent across all loan types. Additionally, changes in factors and inputs may be directionally inconsistent, such that improvement in one factor may offset deterioration in others. The ACL is measured on a collective pool basis when similar risk characteristics exist. Management believes the ACL is adequate to absorb expected losses in the loan portfolio.

Loans
The Company has identified the following portfolio segments:

Commercial & Industrial ("C&I") – C&I loans consist of loans to small and medium-sized businesses in a wide variety of industries, franchise lending, and equipment financing to companies of all sizes. These loans are generally collateralized by inventory, accounts receivable, equipment, and other commercial assets, and may be supported by other credit enhancements such as personal guarantees. Risk arises primarily due to a difference between expected and actual cash flows of the borrower. However, the recoverability of these loans is also dependent on other factors primarily dictated by the type of collateral securing these loans. The fair value of the collateral securing these loans may fluctuate as market conditions change. Included within C&I are revolving loans supported by borrowing bases that fluctuate depending on the amount of underlying collateral.

Commercial Real Estate ("CRE") – CRE loans include various types of loans for which the Company holds real property as collateral. Commercial real estate lending activity is typically restricted to owner-occupied properties or to investor properties that are owned by customers with a current banking relationship. The primary risks of CRE loans include the borrower's inability to pay and material decreases in the value of the real estate being held as collateral.

Faith-based CRE – Faith-based CRE loans include loans to faith-based ministries for which the Company holds real property as collateral. The primary risks of faith-based CRE loans include the borrower's inability to pay and material decreases in the value of the real estate being held as collateral.

Construction and Land Development – The Company originates loans to finance construction projects including faith-based and commercial projects. Construction loans are generally collateralized by first liens on the real estate and have floating interest rates. The primary risks of construction loans are construction completion and timing risk. Adverse economic conditions may negatively impact the borrowers' ability to complete the project. Additionally, the fair value of the underlying collateral may fluctuate as market conditions change.

The ACL is calculated as the difference between the amortized cost basis and the projections from the weighted-average remaining maturity ("WARM") model that the Company developed. The WARM model utilizes an attrition analysis, including events such as payoffs, matured loans, and renewals in the borrowers' control, to anticipate the length of time it would take for each portfolio segment to runoff. Management incorporates a one-year GDP forecast and an immediate reversion to peer historical loss rates to determine the annual charge off rates over the estimated life of the loans. After the reasonable and supportable forecast period, the model reverts to long-run historical average loss rates of its peers. However, for the faith-based CRE ACL, beyond the reasonable and supportable forecast period, loss rates are reverted immediately to the Company's long-run historical averages, as this represents a unique loan segment to the peer portfolios. The economic forecast is based on management's assessment of the length and pattern of the current economic cycle. The resulting annual charge off rate determined for each year in the WARM model is applied to the loan balances estimated in the attrition analysis.

Management accounts for the inherent uncertainty of the underlying economic forecast by reviewing forecast scenarios. Additionally, the ACL calculation includes subjective adjustments for qualitative risk factors that are likely to cause estimated credit losses to differ from historical experience. These qualitative adjustments may increase or reduce reserve levels and include adjustments for lending management experience and risk tolerance, value of underlying collateral, loan review and audit results, asset quality and portfolio trends, loan portfolio growth and loan concentrations. The Company has elected to exclude accrued interest receivable ("AIR") from the allowance for credit losses calculation. When a loan is placed on non-accrual, any recorded AIR is reversed against interest income.

The determination and application of the ACL accounting policy involves judgments, estimates, and uncertainties that are subject to change. Changes in these assumptions, estimates or the conditions surrounding them may have a material impact on the Company's financial condition, liquidity or results of operations. Various regulatory agencies, as an integral part of the examination process, periodically review the ACL. Such agencies may require the Company to recognize additions to the ACL or reserve increases to adversely graded classified loans based on information available to them at the time of their examinations.

The ACL is decreased by net charge-offs and is increased by provisions for credit losses that are charged to the consolidated statements of operations. Charge-offs, if any, are typically measured for each loan based on a thorough analysis of the most probable source of repayment, such as the present value of the loan's expected future cash flows, the loan's estimated fair value, or the estimated fair value of the underlying collateral less costs of disposition for collateral-dependent loans. When it is determined that specific loans, or portions thereof, are uncollectible, these amounts are charged off against the ACL.

Prior to the adoption of ASU 2016-13 as of January 1, 2020, the Company determined reserves for losses on the loan portfolio in the allowance for loan losses ("ALLL"). The ALLL was increased by provisions charged to expense and was available to absorb charge-offs, net of recoveries. Management utilized a systematic, documented approach in determining the appropriate level of the ALLL. Management's approach provided for estimated credit losses on individually evaluated loans in accordance with FASB ASC 310, Allowance for Credit Losses ("ASC 310"). These estimates were based upon a number of factors, such as payment history, financial condition of the borrower, expected future cash flows and discounted collateral exposure.

Unfunded loan commitments
In addition to the ACL for funded loans, the Company maintains reserves to cover the risk of loss associated with off-balance sheet unfunded loan commitments. The allowance for off-balance sheet credit losses is maintained within other liabilities in the statements of financial condition. Under the CECL framework, adjustments to this liability are recorded as provision for credit losses in the consolidated statements of operations. Unfunded loan commitment balances are evaluated by loan segment. In order to establish the required level of reserve, the Company applies average historical utilization rates and ACL loan model loss rates for each loan segment to the outstanding unfunded commitment balances.

Investment securities
Management evaluates all investments in an unrealized loss position on a quarterly basis, and more frequently when economic or market conditions warrant such evaluation. If the Company has the intent to sell the security or it is more likely than not that the Company will be required to sell the security, the security is written down to fair value and the

entire loss is recorded in earnings. If either of the above criteria is not met, the Company will evaluate whether the decline in fair value is the result of credit losses or other factors. In making the assessment, the Company may consider various factors including the extent to which fair value is less than amortized cost, performance on any underlying collateral, downgrades in the ratings of the security by a rating agency, the failure of the issuer to make scheduled interest or principal payments and adverse conditions specifically related to the security. If the assessment indicates that a credit loss exists, the present value of cash flows expected to be collected is compared to the amortized cost basis of the security and any excess is recorded as an allowance for credit loss. For U.S. agency-backed securities where the risk of nonpayment of the amortized cost basis is zero, the Company will not measure expected credit losses on these securities. When the loss is not considered a result of credit loss, the cost basis of the security is written down to fair value, with the loss charge recognized in AOCI. Credit losses are not estimated for AIR from investment securities as interest deemed uncollectible is written off through interest income.

Individually Evaluated Loans A loan is considered individually evaluated when it is probable that a creditor will be unable to collect all amounts due, both principal and interest, according to the contractual terms of the loan agreement. Individually evaluated loans are generally measured based on the expected future cash flows and discounted at the loan's effective interest rate. Alternatively, reference to an observable market price could be used to individually evaluate loans, if one exists, or the fair value of the collateral for a collateral-dependent loan. Regardless of the historical measurement method used, the Company measures individually evaluated loans based on the fair value of the collateral when the Company determines foreclosure is probable. Additionally, troubled debt restructurings are measured by discounting the total expected future cash flows at the loan's effective rate of interest as stated in the original loan agreement. The Company uses its methods as discussed above for recognizing interest on individually evaluated loans.

Foreclosed Assets Real estate acquired as a result of foreclosure is initially recorded at fair value less estimated selling costs. Fair value is generally determined through the receipt of appraisals. Any write down to fair value at the time the property is acquired is recorded as a charge-off to the allowance for credit losses. Any decline in the fair value of the property subsequent to acquisition is recorded as a charge to non-interest expense.

Premises and Equipment Premises and equipment are stated at cost less accumulated depreciation and amortization. Depreciation is computed over the estimated useful lives of the assets, or the respective lease terms for leasehold improvements, using straight-line and accelerated methods. Estimated useful lives do not exceed 40 years for buildings, the lesser of 10 years or the life of the lease for leasehold improvements and range from 3 to 7 years for software, equipment, furniture and fixtures. Maintenance and repairs are charged to expense as incurred.

Intangible Assets Cost in excess of fair value of net assets acquired has resulted from business acquisitions. Goodwill and intangible assets with indefinite useful lives are not amortized, but instead are tested for impairment at least annually. Intangible assets with definite useful lives are amortized on a straight-line basis over their respective estimated useful lives.

Periodically, the Company reviews intangible assets for events or changes in circumstances that may indicate that the carrying amount of the assets may not be recoverable. Based on those reviews, adjustments of recorded amounts have not been required.

Non-marketable Equity Investments The Company accounts for non-marketable equity investments, in which it holds less than a 20% ownership, as equity investments without readily determinable fair values. As a result, the carrying value of the investment is determined under the measurement alternative of cost, less impairment (if any), adjusted for fair value changes when observable prices are available. The Company periodically evaluates for impairment of these investments. In performing this evaluation, the Company considers various factors including the investee's financial condition, results of operations, operating trends and other financial ratios. Non-marketable equity investments are included in other assets on the consolidated balance sheets.

Treasury Stock Purchases of the Company’s common stock are recorded at cost. Upon reissuance, treasury stock is reduced based upon the average cost basis of shares held.

Comprehensive Income Comprehensive income consists of net income, changes in net unrealized gains (losses) on available-for-sale securities and pension liability adjustments and is presented in the accompanying consolidated statements of shareholders' equity and consolidated statements of comprehensive income.

Information Services Revenue A majority of the Company’s revenues are attributable to fees for providing services related to processing and payment of invoices. These services include invoice processing, transportation invoice rating, payment processing and services, auditing, and the generation of accounting and transportation information. The Company also processes, pays and generates management information from electric, gas, telecommunications, environmental, and other invoices. The specific payment and information processing services provided to each customer are developed individually to meet each customer's specific requirements. The Company enters into service agreements with customers typically for fixed fees per transaction that are invoiced monthly. Revenues are recognized in the period services are rendered and earned under the service agreements, as long as collection is reasonably assured.

Income Taxes Deferred tax assets and liabilities are recognized for the estimated 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 in effect for the year in which those temporary differences are expected to be recovered or settled. Deferred tax assets are reduced if necessary, by a deferred tax asset valuation allowance. In the event that management determines it is more likely than not that it will not be able to realize all or part of net deferred tax assets in the future, the Company adjusts the recorded value of deferred tax assets, which would result in a direct charge to income tax expense in the period that such determination is made. Likewise, the Company will reverse the valuation allowance when realization of the deferred tax asset is expected. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. The Company and its subsidiaries file U.S. federal and certain state income tax returns on a consolidated basis. In addition, certain state jurisdictions are filed on a separate company basis by the Company or its subsidiaries.

The Company recognizes and measures income tax benefits using a two-step model: 1) a tax position must be more likely than not to be sustained based solely on its technical merits in order to be recognized; and 2) the benefit must be measured as the largest dollar amount of that position that is more likely than not to be sustained upon settlement. The difference between the benefit recognized for a tax position in this model and the tax benefit claimed on a tax return is treated as an unrecognized tax benefit. The Company recognizes income tax related interest and penalties in income tax expense.

Earnings Per Share Basic earnings per share is computed by dividing net income by the weighted average number of common shares outstanding. Diluted earnings per share is computed by dividing net income by the sum of the weighted average number of common shares outstanding and the weighted average number of potential common shares outstanding.

Stock-Based Compensation The Company follows FASB ASC 718, *Accounting for Stock Options and Other Stock-based Compensation* ("ASC 718"), which requires that all stock-based compensation be recognized as an expense in the financial statements and that such cost be measured at the fair value of the award. ASC 718 also requires that excess tax benefits related to stock option exercises and restricted stock awards be reflected as financing cash inflows instead of operating cash inflows.

Pension Plans The amounts recognized in the consolidated financial statements related to pension are determined from actuarial valuations. Inherent in these valuations are assumptions including expected return on plan assets, discount rates at which the liabilities could be settled at December 31, 2021, rate of increase in future compensation levels and mortality rates. These assumptions are updated annually and are disclosed in Note 10. The Company follows FASB ASC 715-*Compensation – Retirement Benefits* ("ASC 715"), which requires companies to recognize the overfunded or underfunded status of a defined benefit postretirement plan as an asset or liability in its consolidated balance sheet and to recognize changes in that funded status in the year in which the changes occur through comprehensive income. The funded status is measured as the difference between the fair value of the plan assets and the projected benefit obligation as of the date of its fiscal year-end.

Fair Value Measurements The Company follows the provisions of FASB ASC 820-*Fair Value Measurements and Disclosures*, which defines fair value, establishes a framework for measuring fair value in GAAP, and outlines disclosures about fair value measurements. Fair value is defined as the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. A three-level hierarchy for valuation techniques is used to measure financial assets and financial liabilities at fair value. This hierarchy is based on whether the valuation inputs are observable or unobservable. Financial instrument valuations are considered Level 1 when they are based on quoted prices in active markets for identical assets or liabilities. Level 2 financial instrument valuations use quoted prices for similar assets or liabilities, quoted prices in markets that are not active, or other inputs that are observable or can be corroborated by observable market data. Financial instrument valuations are considered Level 3 when they are determined using pricing models, discounted cash flow methodologies or similar techniques and at least one significant model assumption or input is unobservable, and when determination of the fair value requires significant management judgment or estimation. The Company records securities available for sale at their fair values on a recurring basis using Level 2 valuations.

Additionally, the Company records individually evaluated credits and other real estate owned at their fair value on a nonrecurring basis. The nonrecurring fair value adjustments typically involve application of lower-of-cost-or-market accounting or impairment write-downs of individual assets.

Impact of New and Not Yet Adopted Accounting Pronouncements

In June 2016, the FASB issued ASU 2016-13, . The standard was effective for fiscal periods beginning after December 15, 2019. The CARES Act was signed into law on March 27, 2020 and included provisions that temporarily delayed the required implementation date of ASU 2016-13 to the earlier of the end of the national pandemic or December 31, 2020. The Consolidated Appropriations Act was signed into law on December 27, 2020 and extended the deferral of required implementation of ASU 2016-13 to the earlier of the first day of a company's fiscal year that begins after the date the COVID-19 national emergency comes to an end or January 1, 2022. The Company elected to defer the adoption of ASU 2016-13 until December 31, 2020 with an effective date of January 1, 2020.

The ASU required measurement and recognition of expected credit losses for financial instruments held at amortized cost, which include allowances for credit losses expected over the life of the portfolio, rather than incurred losses, which include allowances for current known and inherent losses within the portfolio. Under this standard, the Company is required to hold an allowance equal to the expected life-of-loan losses on the loan portfolio. It also applies to off-balance sheet credit exposures such as loan commitments, standby letters of credit and other similar instruments. In addition, ASU 2016-13 made changes to the accounting for available-for-sale debt securities.

The Company adopted ASU 2016-13 using a modified retrospective approach. Results for annual reporting periods beginning after January 1, 2020 are presented under ASU 2016-13 while prior period amounts continue to be reported in accordance with previously applicable GAAP. Upon adoption, the Company recognized increases of $723,000 in the allowance for credit losses and $402,000 in the reserve for unfunded commitments, with a corresponding reduction to retained earnings, net of tax, of $856,000. No allowance for credit loss was required upon adoption for the investment securities portfolio. Consistent with the provisions of the CARES Act, results for quarterly reporting periods beginning after December 31, 2020 in the Company's Form 10-Q are presented under ASU 2016-13 while prior quarterly period amounts continue to be reported in accordance with previously applicable GAAP.

The following table illustrates the impact of the adoption of ASU 2016-13:

(In thousands)	**December 31, 2019**	**Impact of ASU 2016-13 Adoption**	**As Reported Under ASU 2016-13**
Assets:			
Allowance for loan/credit losses on loans	$ 10,556	$ 723	$ 11,279
Deferred tax asset	2,298	269	2,567
Liabilities:			
Reserve for unfunded commitments	—	402	402
Shareholders' equity:			
Retained earnings	90,341	(856)	89,485

Risks and Uncertainties

On March 11, 2020, the WHO declared the outbreak of COVID-19 as a global pandemic. The declaration of a global pandemic meant that almost all public commerce and related business activities was, to varying degrees, curtailed with the goal of decreasing the rate of new infections. In late fiscal 2020, vaccines for combating COVID-19 were approved by health agencies and have been administered throughout the country. Although vaccination efforts have been widespread and continuing, and a significant amount of previous business and other restrictions have been lifted, the continued impact of COVID-19, including any increases in the infection rates, new variants, and renewed governmental action to slow the spread of COVID-19, cannot be estimated. The ongoing impact of COVID-19, including the impact of restrictions imposed to combat its spread, could result in additional and prolonged business closures, supply chain disruptions, work restrictions and activity restrictions.

The Company is closely monitoring developments related to COVID-19, checking regularly for updated information and recommendations from the WHO and the CDC, from national, state, and local governments, and evaluating courses of action being taken by peers. At this time, the Company remains subject to heightened business, operational, market, credit and other risks related to the COVID-19 pandemic, including, but not limited to, those discussed below, which may have an adverse effect on business, financial condition and results of operations.

Financial position and results of operations - The global health crisis caused by COVID-19 has and will continue to negatively impact business activity throughout the world. The COVID-19 outbreak and associated counter-acting measures implemented by governments around the world, as well as increased business uncertainty and shortages in the labor force, have had, and continue to have, an adverse impact on the Company's financial results and are discussed in more detail below.

Although many restrictions have been relaxed with some success and economic conditions have been improving, many states and localities are still experiencing moderate to high levels of COVID-19 cases, prompting continued restrictions and the need for additional aid and other forms of relief for affected individuals, businesses and other entities. When and if COVID-19 is demonstrably contained, the Company anticipates a rebound in economic activity; however, any such rebound is contingent upon the rate and effectiveness of the containment efforts deployed by federal, state, and local governments. In light of the evolving health, social, economic and business environment, governmental regulations or mandates, and business disruptions that have occurred and could continue to occur, the aggregate impact that COVID-19 could have on the Company's financial condition and operating results remains uncertain.

To the extent any business disruptions continue for an extended period, additional cost control actions will be considered. Future asset impairment charges, increases in allowance for credit losses, or restructuring charges could be more likely and will be dependent on the severity and duration of this crisis and its effect on the Company's borrowers.

For payment processing services, business closures cause a decrease in the number of transactions and dollars processed due to the decline in customers' business activity. Other financial impact could occur, though such potential impact is unknown at this time.

Capital and liquidity - While the Company believes that it has sufficient capital to withstand an extended economic recession brought about by COVID-19, its reported and regulatory capital ratios could be adversely impacted by future financial losses.

The Company maintains access to multiple sources of liquidity. If an extended recession caused large numbers of the Bank's customers to draw down deposits, the Company might become more reliant on more expensive sources of funding.

Asset valuation - Currently, the Company does not expect COVID-19 to affect its ability to fairly value the assets on its balance sheet; however, this could change in future periods. While certain valuation assumptions and judgments will change to account for pandemic-related circumstances such as widening credit spreads, the Company does not anticipate significant changes in methodology used to determine the fair value of assets measured in accordance with GAAP.

An economic slowdown as a result of COVID-19 could cause a decline in the Company's stock price or the occurrence of what management would deem to be a triggering event that could, under certain circumstances, necessitate a goodwill or intangible asset impairment test and result in an impairment charge being recorded for that period. In the event that the Company concludes that all or a portion of its goodwill is impaired, a non-cash charge for the amount of such impairment would be recorded to earnings. Such a charge would have no impact on tangible capital or regulatory capital.

Processes, controls and business continuity - In accordance with its federally mandated Pandemic Plan and Business Continuity Plan, many Cass employees around the globe continue to work and conduct business remotely. In the past several years, Cass has invested in sophisticated technology initiatives that enable employees to operate remotely with full system(s) access along with unified and transparent voice and electronic communications capabilities. The Company cannot predict when or how it will fully lift the actions put in place as part of the Business Continuity Plan, including work from home requirements and travel restrictions. Cass does not believe the work from home protocol has materially adversely impacted internal controls, financial reporting systems, or operations.

Note 2
Capital Requirements and Regulatory Restrictions

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

Quantitative measures established by regulators to ensure capital adequacy require the Company and the Bank to maintain minimum amounts and ratios of total and Tier I capital and common equity Tier I capital to risk-weighted assets, and of Tier I capital to average assets. Management believes that as of December 31, 2021 and 2020, the Company and the Bank met all capital adequacy requirements to which they are subject.

The Bank is also subject to the regulatory framework for prompt corrective action. As of December 31, 2021, the most recent notification from the regulatory agencies categorized the Bank as well-capitalized. To be categorized as well-capitalized, the Bank must maintain 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. There are no conditions or events since that notification that management believes have changed the Bank's category.

The Company has traditionally paid a quarterly cash dividend to its shareholders. Subsidiary dividends can be a significant source of funds for payment of dividends by the Company to its shareholders. Banking regulations may limit the amount of dividends that may be paid. Approval by regulatory authorities is required if the effect of dividends declared would cause the regulatory capital of the Bank to fall below specified minimum levels. Approval is also required if dividends declared exceed the net profits for that year combined with the retained net profits for the preceding two years. Under the foregoing dividend restrictions and while maintaining its "well capitalized" status, at December 31, 2021, unappropriated retained earnings of $34,976,000 were available at the Bank for the declaration of dividends to the Company without prior approval from regulatory authorities. In addition to regulatory requirements and considerations, any payment of dividends in the future will depend on the Company's earnings, financial condition and other factors considered relevant by the Company's Board of Directors.

There were no restricted funds on deposit used to meet regulatory reserve requirements at December 31, 2021 and 2020.

The Company’s and the Bank’s actual and required capital amounts and ratios are as follows:

(In thousands)	Actual Amount	Actual Ratio	Capital Requirements Amount	Capital Requirements Ratio	Requirement to be Well-Capitalized Amount	Requirement to be Well-Capitalized Ratio
At December 31, 2021						
Total capital (to risk-weighted assets)						
Cass Information Systems, Inc.	$ 240,265	14.86 %	$ 129,339	8.00 %	$ N/A	N/A %
Cass Commercial Bank	174,614	17.21	81,163	8.00	101,454	10.00
Common Equity Tier I Capital (to risk-weighted assets)						
Cass Information Systems, Inc.	228,224	14.11	72,764	4.50	N/A	N/A
Cass Commercial Bank	163,030	16.07	45,654	4.50	65,945	6.50
Tier I capital (to risk-weighted assets)						
Cass Information Systems, Inc.	228,224	14.11	97,019	6.00	N/A	N/A
Cass Commercial Bank	163,030	16.07	60,872	6.00	81,163	8.00
Tier I capital (to average assets)						
Cass Information Systems, Inc.	228,224	9.21	99,163	4.00	N/A	N/A
Cass Commercial Bank	163,030	11.05	59,036	4.00	73,795	5.00
At December 31, 2020						
Total capital (to risk-weighted assets)						
Cass Information Systems, Inc.	$ 255,332	21.41 %	$ 95,388	8.00 %	$ N/A	N/A %
Cass Commercial Bank	171,298	21.46	63,855	8.00	79,819	10.00
Common Equity Tier I Capital (to risk-weighted assets)						
Cass Information Systems, Inc.	243,388	20.41	53,656	4.50	N/A	N/A
Cass Commercial Bank	161,300	20.21	35,918	4.50	51,882	6.50
Tier I capital (to risk-weighted assets)						
Cass Information Systems, Inc.	243,388	20.41	71,541	6.00	N/A	N/A
Cass Commercial Bank	161,300	20.21	47,891	6.00	63,855	8.00
Tier I capital (to average assets)						
Cass Information Systems, Inc.	243,388	11.52	84,511	4.00	N/A	N/A
Cass Commercial Bank	161,300	14.48	44,543	4.00	55,679	5.00

Note 3
Investment Securities

Investment securities available-for-sale are recorded at fair value on a recurring basis. The Company’s investment securities available-for-sale at December 31, 2021 and 2020 are measured at fair value using Level 2 valuations. The market evaluation utilizes several sources which include “observable inputs” rather than “significant unobservable inputs” and therefore falls into the Level 2 category. The table below presents the balances of securities available-for-sale measured at fair value on a recurring basis. The amortized cost, gross unrealized gains, gross unrealized losses and fair value of debt and equity securities are summarized as follows:

	December 31, 2021			
(In thousands)	**Amortized Cost**	**Gross Unrealized Gains**	**Gross Unrealized Losses**	**Fair Value**
State and political subdivisions	$ 359,187	$ 12,931	$ (990)	$ 371,128
Mortgage-backed securities issued or guaranteed by U.S. government agencies or sponsored enterprises	170,711	135	(2,200)	168,646
Corporate bonds	84,538	72	(272)	84,338
Asset backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	49,835	—	(494)	49,341
Total	$ 664,271	$ 13,138	$ (3,956)	$ 673,453

	December 31, 2020			
(In thousands)	**Amortized Cost**	**Gross Unrealized Gains**	**Gross Unrealized Losses**	**Fair Value**
State and political subdivisions	$ 287,059	$ 18,915	$ —	$ 305,974
Mortgage-backed securities issued or guaranteed by U.S. government agencies or sponsored enterprises	50,988	764	—	51,752
Total	$ 338,047	$ 19,679	$ —	$ 357,726

The fair values of securities with unrealized losses are as follows:

	December 31, 2021					
	Less than 12 months		**12 months or more**		**Total**	
(In thousands)	**Estimated Fair Value**	**Unrealized Losses**	**Estimated Fair Value**	**Unrealized Losses**	**Estimated Fair Value**	**Unrealized Losses**
State and political subdivisions	$ 60,083	$ 990	$ —	$ —	$ 60,083	$ 990
Mortgage-backed securities issued or guaranteed by U.S. government agencies or sponsored enterprises	163,652	2,200	—	—	163,652	2,200
Corporate bonds	55,120	272	—		55,120	272
Asset backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	49,341	494	—	—	49,341	494
Total	$ 328,196	$ 3,956	$ —	$ —	$ 328,196	$ 3,956

There were 101 securities, or 28%, in an unrealized loss position as of December 31, 2021 compared to zero securities in an unrealized loss position as of December 31, 2020. None of these securities were in an unrealized loss position for greater than 12 months at December 31, 2021. The amortized cost and fair value of debt and equity securities by contractual maturity are shown in the following table. Expected maturities may differ from contractual maturities because borrowers have the right to prepay obligations with or without prepayment penalties.

	December 31, 2021	
(In thousands)	Amortized Cost	Fair Value
Due in 1 year or less	$ 23,959	$ 24,211
Due after 1 year through 5 years	117,319	122,329
Due after 5 years through 10 years	224,344	231,142
Due after 10 years	298,649	295,771
Total	$ 664,271	$ 673,453

The premium related to the purchase of state and political subdivisions was $6,361,000 and $6,013,000 at December 31, 2021 and 2020, respectively.

There were no securities pledged to secure public deposits or for other purposes at December 31, 2021.

Proceeds from sales of investment securities classified as available-for-sale were $63,774,000 in 2021, $21,943,000 in 2020, and $4,648,000 in 2019. Gross realized gains on the sales in 2021, 2020, and 2019 were $55,000, $1,075,000, and $19,000, respectively. There were $4,000 of gross realized losses on sales in 2021 and no gross realized losses in 2020 or 2019.

The Company did not recognize credit losses on any available for sale debt securities in 2021 or 2020.

Note 4
Loans

The Company originates commercial, industrial and real estate loans to businesses and faith-based ministries throughout the metropolitan St. Louis, Missouri area, Orange County, California, Colorado Springs, Colorado and other selected cities in the United States. The Company does not have any particular concentration of credit in any one economic sector; however, a substantial portion of the commercial and industrial loans is extended to privately-held commercial companies and franchises in these market areas and are generally secured by the assets of the business. The Company also has a substantial portion of real estate loans secured by mortgages that are extended to faith-based ministries in its market area and selected cities in the United States.

A summary of loan categories is as follows:

	December 31,	
(In thousands)	2021	2020
Commercial and industrial	$ 450,336	$ 298,984
Real estate:		
Commercial:		
Mortgage	108,759	100,419
Construction	24,797	25,090
Faith-based:		
Mortgage	355,582	333,661
Construction	14,664	23,818
PPP	6,299	109,704
Other	130	—
Total loans	$ 960,567	$ 891,676

The following table presents the aging of loans by loan categories at December 31, 2021:

(In thousands)	Performing: Current	Performing: 30-59 Days	Performing: 60-89 Days	Nonperforming: 90 Days and Over	Nonperforming: Non-accrual	Total Loans
Commercial and industrial	$ 450,336	$ —	$ —	$ —	$ —	$ 450,336
Real estate						
Commercial:						
Mortgage	108,759	—	—	—	—	108,759
Construction	24,797	—	—	—	—	24,797
Faith-based:						
Mortgage	355,582	—	—	—	—	355,582
Construction	14,664	—	—	—	—	14,664
PPP	6,299	—	—	—	—	6,299
Other	130	—	—	—	—	130
Total	$ 960,567	$ —	$ —	$ —	$ —	$ 960,567

The following table presents the aging of loans by loan categories at December 31, 2020:

(In thousands)	Performing: Current	Performing: 30-59 Days	Performing: 60-89 Days	Nonperforming: 90 Days and Over	Nonperforming: Non-accrual	Total Loans
Commercial and industrial	$ 298,984	$ —	$ —	$ —	$ —	$ 298,984
Real estate						
Commercial:						
Mortgage	100,419	—	—	—	—	100,419
Construction	25,090	—	—	—	—	25,090
Faith-based:						
Mortgage	333,661	—	—	—	—	333,661
Construction	23,818	—	—	—	—	23,818
PPP	109,704	—	—	—	—	109,704
Total	$ 891,676	$ —	$ —	$ —	$ —	$ 891,676

The following table presents the credit exposure of the loan portfolio by internally assigned credit grade as of December 31, 2021:

(In thousands)	Loans Subject to Normal Monitoring(1)	Performing Loans Subject to Special Monitoring(2)	Nonperforming Loans Subject to Special Monitoring(2)	Total Loans
Commercial and industrial	$ 440,607	$ 9,729	$ —	$ 450,336
Real estate				
Commercial:				
Mortgage	108,759	—	—	108,759
Construction	24,797	—	—	24,797
Faith-based:				
Mortgage	352,717	2,865	—	355,582
Construction	14,664	—	—	14,664
PPP	6,299	—	—	6,299
Other	130	—	—	130
Total	$ 947,973	$ 12,594	$ —	$ 960,567

(1) Loans subject to normal monitoring involve borrowers of acceptable-to-strong credit quality and risk and have the apparent ability to satisfy their loan obligation.

(2) Loans subject to special monitoring possess some credit deficiency or potential weakness which requires a high level of management attention.

The Company had no loans that were considered individually evaluated credits at December 31, 2021.

The following table presents the credit exposure of the loan portfolio by internally assigned credit grade as of December 31, 2020:

(In thousands)	Loans Subject to Normal Monitoring(1)	Performing Loans Subject to Special Monitoring(2)	Nonperforming Loans Subject to Special Monitoring(2)	Total Loans
Commercial and industrial	$ 284,882	$ 14,102	$ —	$ 298,984
Real estate				
Commercial:				
Mortgage	99,044	1,375	—	100,419
Construction	25,090	—	—	25,090
Faith-based:				
Mortgage	330,554	3,107	—	333,661
Construction	23,818	—	—	23,818
PPP	109,704	—	—	109,704
Total	$ 873,092	$ 18,584	$ —	$ 891,676

(1) Loans subject to normal monitoring involve borrowers of acceptable-to-strong credit quality and risk and have the apparent ability to satisfy their loan obligation.

(2) Loans subject to special monitoring possess some credit deficiency or potential weakness which requires a high level of management attention.

The Company had one loan that was considered an individually evaluated credit in the amount of $2,500,000 at December 31, 2020, with a specific allowance for credit loss of $500,000.

There were no loan modifications considered as troubled debt restructurings during the year ended December 31, 2021. The recorded investment by category for loans considered as troubled debt restructurings during the year ended December 31, 2020 is as follows:

(In thousands)	Number of Loans	Pre-Modification Outstanding Balance	Post-Modification Outstanding Balance
Commercial and industrial	1	$ 8,773	$ 8,773
Faith-based real estate	1	1,029	1,029
Total	2	$ 9,802	$ 9,802

During the year ended December 31, 2020, two loans were restructured to change the amortization schedule to reduce payments from the borrowers while the contractual interest rate remained unchanged. There were no loans restructured that subsequently defaulted during the years ended December 31, 2021 or 2020.

A summary of the ACL by category for the period ended December 31, 2021 is as follows:

(In thousands)	C&I	CRE	Faith-based CRE	Construction	Total
Allowance for credit losses on loans:					
Balance at December 31, 2020	$ 4,635	$ 1,175	$ 5,717	$ 417	$ 11,944
Provision for (release of) credit losses [1]	387	(144)	(48)	(125)	70
Recoveries	12	—	15	—	27
Balance at December 31, 2021	$ 5,034	$ 1,031	$ 5,684	$ 292	$ 12,041

(1) For the period ended December 31, 2021, there was a release of credit losses of $200,000 for unfunded commitments.

A summary of the ACL by category for the period ended December 31, 2020 is as follows:

(In thousands)	C&I	CRE	Faith-based CRE	Construction	Total
Allowance for credit losses on loans:					
Balance at December 31, 2019	$ 4,874	$ 1,528	$ 3,842	$ 312	$ 10,556
Cumulative effect of accounting change (ASU 2016-13)	(526)	(401)	1,636	14	—
Balance at January 1, 2020	4,348	1,127	5,478	326	11,279
Provision for credit losses	268	48	238	91	645
Recoveries	19	—	1	—	20
Balance at December 31, 2020	$ 4,635	$ 1,175	$ 5,717	$ 417	$ 11,944

(1) For the period ended December 31, 2020, there was a provision for credit losses of $165,000 for unfunded commitments.

As of December 31, 2021 and 2020, there were loans totaling $0 and $161,475, respectively, to affiliates of executive officers or directors.

Note 5
Premises and Equipment

A summary of premises and equipment is as follows:

	December 31,	
(In thousands)	**2021**	**2020**
Land	$ 873	$ 873
Buildings	14,834	14,763
Leasehold improvements	2,036	1,953
Furniture, fixtures and equipment	13,551	12,897
Purchased software	4,640	4,278
Internally developed software	22,665	19,538
	58,599	54,302
Less accumulated depreciation	40,486	36,245
Total	$ 18,113	$ 18,057

Total depreciation charged to expense in 2021, 2020 and 2019 amounted to $4,313,000, $4,471,000, and $4,227,000, respectively.

Note 6
Acquired Intangible Assets

The Company accounts for intangible assets in accordance with FASB ASC 350, *Goodwill and Other Intangible Assets*, which requires that intangibles with indefinite useful lives be tested annually for impairment, or when management deems there is a triggering event, and those with finite useful lives be amortized over their useful lives.

Details of the Company's intangible assets are as follows:

	December 31, 2021		December 31, 2020	
(In thousands)	**Gross Carrying Amount**	**Accumulated Amortization**	**Gross Carrying Amount**	**Accumulated Amortization**
Assets eligible for amortization:				
Customer lists	$ 4,778	$ (4,341)	$ 4,778	$ (3,902)
Patent	72	(28)	72	(24)
Software	2,844	(1,104)	2,844	(731)
Trade Name	190	(22)	190	(13)
Other	500	(325)	500	(291)
Unamortized intangible assets:				
Goodwill	14,262	—	14,262	—
Total intangible assets	$ 22,978	$ (6,152)	$ 22,978	$ (5,293)

Customer lists are amortized over 7 and 10 years; patents over 18 years, software over 3 years and 7 years, trade name over 20 years and other intangible assets over 15 years. Amortization of intangible assets amounted to $859,000 for the years ended December 31, 2021, and 2020. Estimated future amortization of intangibles is $540,000 in both 2022 and 2023, $498,000 in 2024, $490,000 in 2025, and $342,000 in 2026.

Note 7
Interest-Bearing Deposits

Interest-bearing deposits consist of the following:

(In thousands)	December 31, 2021	December 31, 2020
Interest-bearing demand deposits	$ 573,567	$ 480,283
Savings deposits	18,110	21,084
Time deposits:		
Less than $100	3,536	4,091
$100 to less than $250	30,648	34,998
$250 or more [(1)]	13,000	16,896
Total	$ 638,861	$ 557,352
Weighted average interest rate	0.15 %	0.31 %

(1) The scheduled maturities of time deposits not covered by deposit insurance consist of $7,010,000 within one year and $5,990,000 within one to three years.

(In thousands)	December 31, 2021	December 31, 2020	December 31, 2019
Interest-bearing demand deposits	$ 582	$ 1,313	$ 3,686
Savings deposits	9	24	103
Time deposits:			
Less than $100	332	550	905
$100 to less than $250	109	206	216
$250 or more	139	267	281
Total	$ 1,171	$ 2,360	$ 5,191

The scheduled maturities of time deposits are summarized as follows:

	December 31,			
	2021		2020	
(In thousands)	Amount	Percent of Total	Amount	Percent of Total
Due within:				
One year	$ 30,855	65.4 %	$ 39,575	70.7 %
Two years	15,061	31.9 %	10,470	18.7 %
Three years	1,205	2.6 %	5,892	10.5 %
Four years	48	0.1 %	—	— %
Five years	15	— %	48	0.1 %
Total	$ 47,184	100.0 %	$ 55,985	100.0 %

Note 8
Unused Available Lines of Credit

As of December 31, 2021, the Bank had unsecured lines of credit at six correspondent banks to purchase federal funds up to a maximum of $83,000,000 in aggregate. As of December 31, 2021, the Bank had secured lines of credit with the Federal Home Loan Bank of $228,849,000 collateralized by commercial mortgage loans. At December 31, 2021, the Company had lines of credit from two banks up to a maximum of $150,000,000 in aggregate collateralized by state and political subdivision securities. There were no amounts outstanding at December 31, 2021, and 2020 under any of the lines of credit.

Note 9
Common Stock and Earnings per Share

The table below shows activity in the outstanding shares of the Company's common stock during 2021.

	2021
Shares outstanding at January 1	14,392,669
Issuance of common stock:	
Employee restricted stock grants	22,393
Employee restricted stock units vested	2,232
Performance-based stock vested	18,336
Employee SARs exercised	7,810
Directors' stock grants	5,450
Shares repurchased	(713,857)
Shares forfeited	(738)
Shares outstanding at December 31	13,734,295

Basic earnings per share is computed by dividing net income by the weighted average number of common shares outstanding. Diluted earnings per share is computed by dividing net income by the sum of the weighted average number of common shares outstanding and the weighted average number of potential common shares outstanding. Under the treasury stock method, stock appreciation rights ("SARs") are dilutive when the average market price of the Company's common stock, combined with the effect of any unamortized compensation expense, exceeds the SAR price during a period.

The calculations of basic and diluted earnings per share are as follows:

	December 31,		
(In thousands except share and per share data)	**2021**	**2020**	**2019**
Basic:			
Net income	$ 28,604	$ 25,176	$ 30,404
Weighted average common shares outstanding	14,091,773	14,364,406	14,434,445
Basic earnings per share	$ 2.03	$ 1.75	$ 2.11
Diluted:			
Net income	$ 28,604	$ 25,176	$ 30,404
Weighted average common shares outstanding	14,091,773	14,364,406	14,434,445
Effect of dilutive restricted stock, performance based restricted stock ("PBRS"), and SARs	238,103	202,541	257,480
Weighted average common shares outstanding assuming dilution	14,329,876	14,566,947	14,691,925
Diluted earnings per share	$ 2.00	$ 1.73	$ 2.07

Note 10
Employee Benefit Plans

Defined Benefit Plan

The Company has a noncontributory defined-benefit pension plan (the "Plan"), which covers eligible employees. Effective December 31, 2016, the Plan was closed to all new participants. Additionally, the Company froze the benefits of the Plan as of February 28, 2021. As such, subsequent to February 28, 2021, there is no service cost associated with the Plan. The Company accrues and makes contributions designed to fund normal service costs on a current basis using the projected unit credit with service proration method to amortize prior service costs arising from improvements in pension benefits and qualifying service prior to the establishment of the Plan over a period of approximately 30 years.

A summary of the activity in the Plan's projected benefit obligation, assets, funded status and amounts recognized in the Company's consolidated balance sheets is as follows:

(In thousands)	2021	2020
Projected benefit obligation:		
Balance, January 1	$ 122,035	$ 119,827
Service cost	1,002	4,329
Interest cost	3,076	3,908
Actuarial (gain) loss	(5,822)	15,087
Plan amendments	—	(18,322)
Benefits paid	(2,968)	(2,794)
Balance, December 31	$ 117,323	$ 122,035
Plan assets:		
Fair value, January 1	$ 106,667	$ 94,634
Actual return	10,107	14,826
Employer contribution	330	—
Benefits paid	(2,968)	(2,793)
Fair value, December 31	$ 114,136	$ 106,667
Funded status:		
Accrued pension liability	$ (3,187)	(15,368)

The following represent the major assumptions used to determine the projected benefit obligation of the Plan. For 2021, 2020 and 2019, the Plan's expected benefit cash flows were discounted using the FTSE Above Median Double-A Curve. For 2021, the Pri-2012 Mortality Table and MP-2022 Mortality Improvement Scale were used. For 2020, the Pri-2012 Mortality Table and MP-2020 Mortality Improvement Scale were used. For 2019, the Pri-2012 Mortality Table and MP-2019 Mortality Improvement Scale were used.

	2021	2020	2019
Weighted average discount rate	2.85 %	2.55 %	3.30 %
Rate of increase in compensation levels	(a)	(a)	(a)

(a) 6.0% graded down to 3.25% over the first seven years of service.

The accumulated benefit obligation was $117,323,000 and $121,095,000 as of December 31, 2021 and 2020, respectively. The Company made a contribution of $330,000 during 2021, while in 2020 there was no contribution made to the Plan. The Company has not determined if it will make a contribution to the Plan in 2022. The following pension benefit payments, which reflect expected future service, as appropriate, are expected to be paid by the Plan:

	Amount
2022	$ 3,771,000
2023	4,165,000
2024	4,396,000
2025	4,593,000
2026	4,802,000
2026-2030	26,978,000

The Plan's pension cost included the following components:

(In thousands)	For the Year Ended December 31, 2021	2020	2019
Service cost – benefits earned during the year	$ 1,002	$ 4,329	$ 3,555
Interest cost on projected benefit obligations	3,076	3,908	4,103
Expected return on plan assets	(6,310)	(6,049)	(4,753)
Net amortization and deferral	393	1,946	1,559
Net periodic pension (benefit) cost	$ (1,839)	$ 4,134	$ 4,464

The following represent the major assumptions used to determine the net pension cost of the Plan:

	2021	2020	2019
Weighted average discount rate	2.55 %	3.30 %	4.30 %
Rate of increase in compensation levels	(a)	(a)	(a)
Expected long-term rate of return on assets	6.00 %	6.50 %	6.50 %

(a) 6.0% graded down to 3.25% over the first seven years of service

For 2021, the Pri-2012 Mortality Table and the MP-2020 Mortality Improvement Table were used. For 2020, the Pri-2012 Mortality Table and the MP-2019 Mortality Improvement Table were used. For 2019, the RP-2014 Mortality Table and the MP-2018 Mortality Improvement Table were used.

The investment objective for the Plan is to maximize total return with a tolerance for average risk. Asset allocation is a balance between fixed income and equity investments, with a target allocation of approximately 51% fixed income, 23% U.S. equity and 26% non-U.S. equity. Due to volatility in the market, this target allocation is not always desirable and asset allocations can fluctuate between acceptable ranges. The fixed income component is invested in pooled investment grade securities. The equity components are invested in pooled large cap, small/mid cap and non-U.S. stocks. The expected one-year nominal returns and annual standard deviations are shown by asset class below:

Asset Class	% of Total Portfolio	One-Year Nominal Return	Annual Standard Deviation
Core Fixed Income	51 %	3.95 %	8.82 %
Large Cap U.S. Equities	18 %	7.24 %	17.27 %
Small Cap U.S. Equities	5 %	8.57 %	22.09 %
International (Developed)	18 %	8.34 %	18.39 %
International (Emerging)	8 %	11.12 %	27.24 %

Applying appropriate correlation factors between each of the asset classes the long-term rate of return on assets is estimated to be 6.00%.

A summary of the fair value measurements by type of asset is as follows:

	Fair Value Measurements as of December 31,					
	2021			2020		
(In thousands)	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Observable Inputs (Level 2)	Total	Quoted Prices in Active Markets for Identical Assets (Level 1)	Observable Inputs (Level 2)
Cash	$ 535	$ 535	$ —	$ 484	$ 484	$ —
Real estate investment trusts	6,250	—	6,250	—	—	—
Equity securities						
U.S. Small/Mid Cap Growth	4,734	—	4,734	5,530	—	5,530
Non-U. S. Core	19,164	—	19,164	26,342	—	26,342
U.S. Large Cap Passive	18,279	—	18,279	17,520	—	17,520
Emerging Markets	7,701	—	7,701	5,882	—	5,882
Fixed Income						
U.S. Core	51,386	—	51,386	23,467	—	23,467
U.S. Passive	—	—	—	21,680	—	21,680
Opportunistic	6,087	—	6,087	5,762	—	5,762
Total	$ 114,136	$ 535	$ 113,601	$ 106,667	$ 484	$ 106,183

Supplemental Executive Retirement Plan

The Company also has an unfunded supplemental executive retirement plan ("SERP") which covers key executives of the Company whose benefits are limited by the Internal Revenue Service under the Company's qualified retirement plan. The SERP is a noncontributory plan in which the Company's subsidiaries make accruals designed to fund normal service costs on a current basis using the same method and criteria as the Plan.

A summary of the activity in the SERP's projected benefit obligation and amounts recognized in the Company's consolidated balance sheets is as follows:

	December 31,	
(In thousands)	2021	2020
Benefit obligation:		
Balance, January 1	$ 13,412	$ 11,712
Service cost	147	121
Interest cost	291	347
Benefits paid	(282)	(291)
Actuarial (gain)/loss	(1,148)	1,523
Balance, December 31	$ 12,420	$ 13,412

The following represent the major assumptions used to determine the projected benefit obligation of the SERP. For 2021, 2020 and 2019, the SERP's expected benefit cash flows were discounted using the FTSE Above Median Double-A Curve.

	2021	2020	2019
Weighted average discount rate	2.65 %	2.20 %	3.00 %
Rate of increase in compensation levels	(a)	(a)	(a)

(a) 6.00% graded down to 3.25% over the first seven years of service.

The accumulated benefit obligation was $12,420,000 and $12,492,000 as of December 31, 2021 and 2020, respectively. Since this is an unfunded plan, there are no plan assets. Benefits paid were $282,000 in 2021, $291,000 in 2020, and $262,000 in 2019. Expected future benefits payable by the Company over the next ten years are as follows:

		Amount
2022	$	823,000
2023		804,000
2024		802,000
2025		799,000
2026		795,000
2026-2030	$	3,878,000

Net periodic pension cost related to the SERP included the following components:

	For the Year Ended December 31,					
(In thousands)		2021		2020		2019
Service cost – benefits earned during the year	$	147	$	121	$	97
Interest cost on projected benefit obligations		291		347		408
Net amortization and deferral		203		112		276
Net periodic pension cost	$	641	$	580	$	781

The pretax amounts in accumulated other comprehensive loss as of December 31 were as follows:

	The Plan				SERP			
(In thousands)		2021		2020		2021		2020
Prior service cost	$	—	$	—	$	—	$	—
Net actuarial loss		5,417		15,429		2,783		4,135
Total	$	5,417	$	15,429	$	2,783	$	4,135

The estimated pretax prior service cost and net actuarial loss in accumulated other comprehensive loss at December 31, 2021 expected to be recognized as components of net periodic benefit cost in 2022 for the Plan are both $0. The estimated pretax prior service cost and net actuarial loss in accumulated other comprehensive loss at December 31, 2021 expected to be recognized as components of net periodic benefit cost in 2022 for the SERP are $0 and $108,000 respectively.

The Company also maintains a noncontributory profit sharing program, which covers most of its employees. Employer contributions are calculated based upon formulas which relate to current operating results and other factors. Profit sharing expense recognized in personnel expense in the consolidated statements of income in 2021, 2020, and 2019 was $6,436,000, $5,665,000, and $6,841,000, respectively.

The Company also sponsors a defined contribution 401(k) plan to provide additional retirement benefits to substantially all employees. Contributions under the 401(k) plan for 2021, 2020 and 2019 were $3,488,000, $1,508,000, and $1,378,000, respectively. In conjunction with the freezing of the Plan, contribution rates to employees increased on March 1, 2021.

Note 11
Stock-based Compensation

The Amended and Restated Omnibus Stock and Performance Compensation Plan (the “Omnibus Plan”) provides incentive opportunities for key employees and non-employee directors and to align the personal financial interests of such individuals with those of the Company’s shareholders. The Omnibus Plan permits the issuance of up to 1,500,000 shares of the Company’s common stock in the form of stock options, SARs, restricted stock, restricted stock units and performance awards.

Restricted Stock

Restricted shares granted to Company employees are amortized to expense over the three-year cliff vesting period. Restricted shares granted to members of the Board of Directors are amortized to expense over a one-year service period, with the exception of those shares granted in lieu of cash payments for retainer fees which are expensed in the period earned.

Changes in restricted shares outstanding for the year ended December 31, 2021 were as follows:

	Shares	**Weighted Average Grant Date Fair Value**
Balance at December 31, 2020	136,167	$ 46.78
Granted	53,906	$ 41.55
Vested	(23,782)	$ 48.43
Forfeited	(738)	$ 46.07
Balance at December 31, 2021	165,553	$ 44.81

During 2020 and 2019, 38,226 and 36,812 shares, respectively, were granted with weighted average per share market values at date of grant of $47.07 in 2020 and $49.30 in 2019. The fair value of such shares are based on the market price on the date of grant. Amortization of the restricted stock bonus awards totaled $1,793,000 for 2021, $1,463,000 for 2020 and $1,551,000 for 2019. As of December 31, 2021, the total unrecognized compensation expense related to non-vested restricted stock awards was $1,647,000, and the related weighted average period over which it is expected to be recognized is approximately 0.57 years. The total fair value of shares vested during the years ended December 2021, 2020, and 2019 was $1,152,000, $1,005,000, and $527,000, respectively.

Performance-Based Restricted Stock

The Company has granted three-year PBRS awards which are contingent upon the Company's achievement of pre-established financial goals over a three-year cliff vest period. The number of shares issued ranges from 0% to 150% of the target opportunity based on the actual achievement of financial goals for the three-year performance period.

Following is a summary of the activity of the PBRS, based on 100% of target value:

	For the Years Ended December 31, 2021	
	Shares	**Fair Value**
Balance at December 31, 2020	98,410	$ 50.64
Granted	52,240	40.74
Vested	(33,000)	49.07
Forfeited	(1,107)	46.07
Balance at December 31, 2021	116,543	$ 46.79

The PBRS that vested during the year ended December 31, 2021 achieved financial goals of 94.4%, resulting in the issuance of 31,150 shares of common stock. The PBRS that vested during the year ended December 31, 2020 achieved financial goals of 117.3%, resulting in the issuance of 34,222 shares of common stock. The outstanding PBRS at December 31, 2021 will vest at scheduled vesting dates and the actual number of shares of common stock issued will range from 0% to 150% of the target opportunity based on the actual achievement of financial goals for the respective three-year performance period.

SARs

During 2021, there were no SARs granted and no expense recognized. As of December 31, 2021, there was no unrecognized compensation expense related to SARs.

Changes in SARs outstanding for the year ended December 31, 2021 were as follows:

	SARs	Weighted Average Exercise Price
Balance at December 31, 2020	144,999	$ 32.99
Exercised	(25,822)	24.38
Forfeited	(2,088)	31.92
Balance at December 31, 2021	117,089	34.91
Exercisable at December 31, 2021	117,089	$ 34.91

The total intrinsic value of SARs exercised during 2021 and 2020 was $630,000 and $275,000, respectively. The average remaining contractual term for SARs outstanding as of December 31, 2021 was 1.21 years, and the aggregate intrinsic value was $741,000. The average remaining contractual term for SARs outstanding as of December 31, 2020 was 1.95 years, and the aggregate intrinsic value was $1,095,000.

The total compensation cost for share-based payment arrangements was $2,859,000, $2,267,000, and $3,144,000, in 2021, 2020, and 2019, respectively.

Note 12
Other Operating Expense

Details of other operating expense are as follows:

	For the Years Ended December 31,		
(In thousands)	2021	2020	2019
Postage and supplies	$ 1,851	$ 1,465	$ 1,875
Promotional expense	2,627	2,184	3,838
Professional fees	1,625	2,140	2,388
Outside service fees	7,413	5,845	5,529
Data processing services	2,650	1,900	1,283
Telecommunications	554	765	748
Other	23	1,088	2,404
Total other operating expense	$ 16,743	$ 15,387	$ 18,065

Note 13
Income Taxes

The components of income tax expense (benefit) are as follows:

	For the Years Ended December 31,		
(In thousands)	2021	2020	2019
Current:			
Federal	$ 5,018	$ 5,350	$ 4,423
State	897	671	1,392
Deferred:			
Federal	(608)	(636)	1,097
State	(90)	(220)	150
Total income tax expense	$ 5,217	$ 5,165	$ 7,062

A reconciliation of expected income tax expense (benefit), computed by applying the effective federal statutory rate of 21% for each year to income before income tax expense is as follows:

	For the Years Ended December 31,		
(In thousands)	**2021**	**2020**	**2019**
Expected income tax expense	$ 7,103	$ 6,385	$ 7,868
(Reductions) increases resulting from:			
Tax-exempt income	(1,673)	(1,588)	(1,755)
State taxes, net of federal benefit	638	356	1,218
Share-based compensation adjustment	92	70	(281)
Federal tax credits	(357)	(336)	(158)
Other, net	(586)	278	170
Total income tax expense	$ 5,217	$ 5,165	$ 7,062

Income tax expense in 2021 totaled $5,217,000 compared to $5,165,000 and $7,062,000 in 2020 and 2019, respectively. When measured as a percent of pre-tax income, the Company's effective tax rate was 15.4% in 2021, 17.0% in 2020, and 18.8% in 2019.

The tax effects of temporary differences which give rise to significant portions of the deferred tax assets and deferred tax liabilities are presented below:

	December 31,	
(In thousands)	**2021**	**2020**
Deferred tax assets:		
Allowance for credit losses	$ 2,866	$ 2,858
ASC 715 pension funding liability	1,952	4,656
Supplemental executive retirement plan accrual	2,293	2,220
Stock compensation	1,875	1,794
Lease liability	1,145	1,436
Other	633	—
Total deferred tax assets	$ 10,764	$ 12,964
Deferred tax liabilities:		
Premises and equipment	$ (2,235)	$ (2,693)
Pension	(531)	(14)
Intangible assets	(1,493)	(1,761)
Unrealized gain on investment securities available-for-sale	(2,185)	(4,684)
Right of use asset	(1,032)	(1,291)
Other	(497)	(224)
Total deferred tax liabilities	$ (7,973)	$ (10,667)
Net deferred tax assets	$ 2,791	$ 2,297

A valuation allowance would be provided on deferred tax assets when it is more likely than not that some portion of the assets will not be realized. The Company has not established a valuation allowance at December 31, 2021 or 2020, due to management's belief that it is more likely than not that the deferred tax asset is realizable.

The reconciliation of the beginning unrecognized tax benefits balance to the ending balance is presented in the following table:

(In thousands)		2021		2020		2019
Balance at January 1	$	1,231	$	1,299	$	1,403
Changes in unrecognized tax benefits as a result of tax positions taken during a prior year		165		62		56
Changes in unrecognized tax benefits as a result of tax position taken during the current year		239		233		171
Reductions to unrecognized tax benefits as a result of a lapse of the applicable statute of limitations		(230)		(315)		(331)
Decreases in unrecognized tax benefits as a result of settlements with taxing authorities		—		(48)		—
Balance at December 31	$	1,405	$	1,231	$	1,299

At December 31, 2021, 2020 and 2019, the balances of the Company's unrecognized tax benefits which would, if recognized, affect the Company's effective tax rate were $1,134,000, $1,096,000 and $1,184,000, respectively. These amounts are net of the offsetting benefits from other taxing jurisdictions.

As of December 31, 2021, 2020 and 2019, the Company had $85,000, $114,000 and $151,000, respectively, in accrued interest related to unrecognized tax benefits.

The Company believes it is reasonably possible that the total amount of unrecognized tax benefits will decrease by approximately $199,000 over the next 12 months. The reduction primarily relates to the anticipated lapse in the statute of limitations. The unrecognized tax benefits relate primarily to apportionment of taxable income among various state tax jurisdictions.

The Company is subject to income tax in the U.S. federal jurisdiction, numerous state jurisdictions, and a foreign jurisdiction. The Company's federal income tax returns for tax years 2018, 2019 and 2020 remain subject to examination by the Internal Revenue Service. In addition, the Company is subject to state tax examinations for the tax years 2017 through 2020.

Note 14
Disclosures about Fair Value of Financial Instruments

Following is a summary of the carrying amounts and fair values of the Company's financial instruments:

	December 31,							
	2021				2020			
(In thousands)		Carrying Amount		Fair Value		Carrying Amount		Fair Value
Balance sheet assets:								
Cash and cash equivalents	$	514,928	$	514,928	$	670,528	$	670,528
Investment securities		673,453		673,453		357,726		357,726
Loans, net		948,526		948,701		879,732		883,461
Accrued interest receivable		6,799		6,799		6,850		6,850
Total	$	2,143,706	$	2,143,881	$	1,914,836	$	1,918,565
Balance sheet liabilities:								
Deposits	$	1,221,503	$	1,221,503	$	1,050,856	$	1,050,856
Accounts and drafts payable		1,050,396		1,050,396		835,386		835,386
Accrued interest payable		16		16		38		38
Total	$	2,271,915	$	2,271,915	$	1,886,280	$	1,886,280

The following methods and assumptions were used to estimate the fair value of each class of financial instruments for which it is practicable to estimate that value:

Cash and Cash Equivalents The carrying amount approximates fair value.

Investment Securities The fair value is measured on a recurring basis using Level 2 valuations. Refer to Note 3 - Investment Securities, for fair value and unrealized gains and losses by investment type.

Loans The fair value is estimated using present values of future cash flows discounted at risk-adjusted interest rates for each loan category designated by management and is therefore a Level 3 valuation. Management believes that the risk factor embedded in the interest rates along with the allowance for credit losses approximates a fair valuation.

Individually assessed loans are valued using the fair value of the collateral which is based upon an observable market price or current appraised value and therefore, the fair value is a nonrecurring Level 3 valuation.

Accrued Interest Receivable The carrying amount approximates fair value.

Deposits The fair value of demand deposits, savings deposits and certain money market deposits is the amount payable on demand at the reporting date. The fair value of fixed-maturity certificates of deposit is estimated using the rates currently offered for deposits of similar remaining maturities and therefore, is a Level 2 valuation. The fair value estimates above do not include the benefit that results from the low-cost funding provided by the deposit liabilities compared to the cost of borrowing funds in the market or the benefit derived from the customer relationship inherent in existing deposits.

Accounts and Drafts Payable The carrying amount approximates fair value.

Accrued Interest The carrying amount approximates fair value.

Limitations Fair value estimates are based on existing on- and off-balance sheet financial instruments without attempting to estimate the value of anticipated future business and the value of assets and liabilities that are not considered financial instruments. Other significant assets or liabilities that are not considered financial assets or liabilities include premises and equipment and the benefit that results from the low-cost funding provided by the deposit liabilities compared to the cost of borrowing funds in the market (core deposit intangible). In addition, tax ramifications related to the realization of the unrealized gains and losses can have a significant effect on fair value estimates and have not been considered in any of the estimates.

Note 15
Commitments and Contingencies

The Company is party to financial instruments with off-balance sheet risk in the normal course of business to meet the financing needs of its customers. These financial instruments include commitments to extend credit, commercial letters of credit and standby letters of credit. The Company's maximum potential exposure to credit loss in the event of nonperformance by the other party to the financial instrument for commitments to extend credit, commercial letters of credit and standby letters of credit is represented by the contractual amounts of those instruments. At December 31, 2021, an allowance for unfunded commitments of $367,000 had been recorded, as compared to $567,000 at December 31, 2020. See Item 8, "Financial Statements and Supplementary Data—Note 1" for information related to CECL adoption.

Commitments to extend credit are agreements to lend to a customer as long as there is no violation of any condition established in the contract. Commercial and standby letters of credit are commitments issued by the Company to guarantee the performance of a customer to a third party. These off-balance sheet financial instruments generally have fixed expiration dates or other termination clauses and may require payment of a fee. The approximate remaining terms of commercial and standby letters of credit range from less than one to five years. Since these financial instruments may expire without being drawn upon, the total amounts do not necessarily represent future cash requirements. Commitments to extend credit and letters of credit are subject to the same underwriting standards as those financial instruments included on the consolidated balance sheets. The Company evaluates each customer's credit-worthiness on a case-by-case basis. The amount of collateral obtained, if deemed necessary upon extension of the credit, is based on management's credit evaluation of the borrower. Collateral held varies, but is generally accounts receivable, inventory, residential or income-producing commercial property or equipment. In the event of nonperformance, the Company may obtain and liquidate the collateral to recover amounts paid under its guarantees on these financial instruments.

The following table shows commitments to extend credit, standby letters of credit and commercial letters:

	December 31,	
(In thousands)	**2021**	**2020**
Commitments to extend credit	$ 208,395	$ 192,916
Standby letters of credit	12,859	10,609
Commercial letters of credit	771	955

The fair value of commitments to extend credit and standby letters of credit is estimated using the fees currently charged to enter into similar agreements, taking into account the remaining terms of the agreements, the likelihood of the counterparties drawing on such financial instruments and the present credit worthiness of such counterparties. The Company believes such commitments have been made at terms which are competitive in the markets in which it operates; however, no premium or discount is offered thereon.

The Company and its subsidiaries are not involved in any pending proceedings other than ordinary routine litigation incidental to their businesses. Management believes none of these proceedings, if determined adversely, would have a material effect on the business or financial condition of the Company or its subsidiaries.

Note 16
Revenue from Contracts with Customers

Revenue is recognized as the obligation to the customer is satisfied. The following is detail of the Company's revenue from contracts with clients.

Invoice processing fees – The Company earns fees on a per-item or monthly basis for the invoice processing services rendered on behalf of customers. Per-item fees are recognized at the point in time when the performance obligation is satisfied. Monthly fees are earned over the course of a month, representing the period over which the performance obligation is satisfied. The contracts have no significant impact of variable consideration and no significant financing components.

Invoice payment fees – The Company earns fees on a transaction level basis for invoice payment services when making customer payments. Fees are recognized at the point in time when the payment transactions are made, which is when the performance obligation is satisfied. The contracts have no significant impact of variable consideration and no significant financing components.

Bank service fees – Revenue from service fees consists of service charges and fees on deposit accounts under depository agreements with customers to provide access to deposited funds. Service charges on deposit accounts are transaction-based fees that are recognized at the point in time when the performance obligation is satisfied. Service charges are recognized on a monthly basis representing the period over which the performance obligation is satisfied. The contracts have no significant impact of variable consideration and no significant financing components.

The following table presents non-interest income, segregated by revenue streams in-scope and out-of-scope of ASC 606, *Revenue from Contracts with Customers* ("ASC 606") for the years ended December 31, 2021, 2020, and 2019.

	For the Years Ended December 31,		
(In thousands)	**2021**	**2020**	**2019**
Fee revenue and other income			
In-scope of ASC 606			
Invoice processing fees	$ 77,704	$ 74,674	$ 81,329
Invoice payment fees	28,751	22,530	26,624
Information services payment and processing revenue	106,455	97,204	107,953
Bank service fees	2,239	1,704	1,386
Fee revenue *(in-scope of ASC 606)*	108,694	98,908	109,339
Other income *(out-of-scope of ASC 606)*	997	1,533	730
Total fee revenue and other income	$ 109,691	$ 100,441	$ 110,069

Note 17
Industry Segment Information

The services provided by the Company are classified into two reportable segments: Information Services and Banking Services. Each of these segments provides distinct services that are marketed through different channels. They are managed separately due to their unique service and processing requirements.

The Information Services segment provides transportation, energy, telecommunication, and environmental invoice processing and payment services to large corporations. The Banking Services segment provides banking services primarily to privately held businesses and faith-based ministries, including on-line generosity services, as well as supporting the banking needs of the Information Services segment.

The Company's accounting policies for segments are the same as those described in Note 1 of this report. Management evaluates segment performance based on tax-equivalized (as defined in the footnote to the chart on the following table) pre-tax income after allocations for corporate expenses. Transactions between segments are accounted for at what management believes to be fair value.

Substantially all revenue originates from, and all long-lived assets are located within the United States, and no revenue from any customer of any segment exceeds 10% of the Company's consolidated revenue.

Funding sources represent average balances and deposits generated by Information Services and Banking Services and there is no allocation methodology used. Segment interest income is a function of the relative share of average funding sources generated by each segment multiplied by the following rates:

- Information Services – one or more fixed rates depending upon the specific characteristics of the funding source, and
- Banking Services – a variable rate that is based upon the overall performance of the Company's earning assets.

Any difference between total segment interest income and overall total Company interest income is included in Corporate, Eliminations, and Other.

Summarized information about the Company's operations in each industry segment for the years ended December 31, 2021, 2020 and 2019 is as follows:

(In thousands)	Information Services	Banking Services	Corporate, Eliminations and Other	Total
2021				
Fee income from customers	$ 105,452	$ 2,631	$ 1,608	$ 109,691
Interest income*	24,332	24,732	(1,694)	47,370
Interest expense	—	1,171	—	1,171
Intersegment income (expense)	—	3,222	(3,222)	—
Tax-equivalized pre-tax income*	26,368	10,082	(756)	35,694
Goodwill	12,433	1,829	—	14,262
Other intangible assets, net	329	2,235	—	2,564
Total Assets	1,152,917	1,500,060	(98,076)	2,554,901
Funding Sources	937,478	876,018	—	1,813,496
2020				
Fee income from customers	$ 96,548	$ 2,607	$ 1,286	$ 100,441
Interest income*	20,343	29,494	(261)	49,576
Interest expense	—	2,362	—	2,362
Intersegment income (expense)	—	2,315	(2,315)	—
Tax-equivalized pre-tax income*	17,178	14,025	1,027	32,230
Goodwill	12,433	1,829	—	14,262
Other intangible assets, net	735	2,688	—	3,423
Total Assets	967,702	1,242,688	(7,155)	2,203,235
Funding Sources	734,999	738,165	—	1,473,164
2019				
Fee income from customers	$ 107,942	$ 1,660	$ 467	$ 110,069
Interest income*	21,538	30,646	2,510	54,694
Interest expense	—	5,193	—	5,193
Intersegment income (expense)	—	2,107	(2,107)	—
Tax-equivalized pre-tax income*	23,524	13,048	2,978	39,550
Goodwill	12,433	1,829	—	14,262
Other intangible assets, net	1,142	3,139	—	4,281
Total Assets	844,483	915,341	4,419	1,764,243
Funding Sources	676,068	592,905	—	1,268,973

* Presented on a tax-equivalent basis assuming a tax rate of 21%. The tax-equivalent adjustment was approximately $1,873,000 for 2021, $1,888,000 for 2020, and $2,084,000 for 2019.

Note 18
Leases

The Company leases certain premises under operating leases. As of December 31, 2021, the Company had lease liabilities of $4,887,000 and right-of-use assets of $4,421,000. Lease liabilities and right-of-use assets are reflected in other liabilities and other assets, respectively. Included in occupancy expense on the consolidated statements of income for 2021 was operating lease cost of $1,651,000, short-term lease cost of $186,000, and there was no variable lease cost. The Company paid cash of $1,779,000 for operating lease amounts included in the measurement of lease liabilities for the year ended December 31, 2021. No right-of-use assets were obtained in exchange for lease liabilities during the year ended December 31, 2021.

For the year ended December 31, 2021, the weighted average remaining lease term for the operating leases was 6.1 years and the weighted average discount rate used in the measurement of operating lease liabilities was 5.4%. Certain of the Company's leases contain options to renew the lease; however, these renewal options are not included in the calculation of the lease liabilities as they are not reasonably certain to be exercised. There has been no significant change in the Company's expected future minimum lease payments since December 31, 2020.

A maturity analysis of operating lease liabilities and undiscounted cash flows as of December 31, 2021 was as follows:

(In thousands)		**December 31, 2021**
Lease payments due		
Less than 1 year	$	1,735
1-2 years		814
2-3 years		553
3-4 years		555
4-5 years		545
Over 5 years		1,497
Total undiscounted cash flows		5,699
Discount on cash flows		812
Total lease liability	$	4,887

There were no sale and leaseback transactions, leveraged leases, or lease transactions with related parties during the year ended December 31, 2021. At December 31, 2021, the Company did not have any leases that had not yet commenced.

Note 19
Subsequent Events

In accordance with FASB ASC 855, *Subsequent Events*, the Company has evaluated subsequent events after the consolidated balance sheet date of December 31, 2021, and there were no events identified that would require additional disclosures to prevent the Company's consolidated financial statements from being misleading.

Note 20
Condensed Financial Information of Parent Company

Following are the condensed balance sheets of the Company (parent company only) and the related condensed statements of income and cash flows.

	Condensed Balance Sheets December 31,	
(In thousands)	**2021**	**2020**
Assets		
Cash and due from banks	$ 132,050	$ 51,714
Short-term investments	585	235,452
Securities available-for-sale, at fair value	566,835	357,726
Loans, net	40,515	49,314
Payments in advance of funding	291,427	194,563
Investments in subsidiaries	164,650	162,341
Premises and equipment, net	17,443	17,459
Other assets	95,940	69,162
Total assets	$ 1,309,445	$ 1,137,731
Liabilities and Shareholders' Equity		
Liabilities:		
Accounts and drafts payable	$ 1,041,070	$ 832,420
Other liabilities	22,577	44,151
Total liabilities	1,063,647	876,571
Total shareholders' equity	245,798	261,160
Total liabilities and shareholders' equity	$ 1,309,445	$ 1,137,731

	Condensed Statements of Income For the Years Ended December 31,		
(In thousands)	**2021**	**2020**	**2019**
Income from subsidiaries – management fees	$ 3,115	$ 2,854	$ 2,599
Information services revenue	104,426	95,078	106,198
Net interest income after (release of) provision for credit losses	11,316	10,932	15,713
Gain on sales of investment securities	51	1,075	19
Other income	919	458	518
Total income	119,827	110,397	125,047
Expenses:			
Salaries and employee benefits	80,434	77,577	81,432
Other expenses	27,406	25,347	26,136
Total expenses	107,840	102,924	107,568
Income before income tax and equity in undistributed income of subsidiaries	11,987	7,473	17,479
Income tax expense	635	340	2,860
Income before undistributed income of subsidiaries	11,352	7,133	14,619
Equity in undistributed income of subsidiaries	17,252	18,043	15,785
Net income	$ 28,604	$ 25,176	$ 30,404

(In thousands)	Condensed Statements of Cash Flows For the Years Ended December 31, 2021	2020	2019
Cash flows from operating activities:			
Net income	$ 28,604	$ 25,176	$ 30,404
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Equity in undistributed income of subsidiaries	(17,252)	(18,043)	(15,785)
Net change in other assets	(212)	6,054	(6,289)
Net change in other liabilities	(9,307)	(6,525)	9,474
Stock-based compensation expense	2,859	2,267	3,144
Other, net	20,921	18,236	6,104
Net cash provided by operating activities	25,613	27,165	27,052
Cash flows from investing activities:			
Net (increase) decrease in securities	(226,090)	65,689	26,150
Net decrease (increase) in loans	8,799	(2,545)	(24,999)
Net (increase) decrease in payments in advance of funding	(96,864)	11,595	(45,381)
Purchase of bank-owned life insurance	(25,119)	—	—
Purchases of premises and equipment, net	(2,233)	(1,810)	(2,637)
Asset acquisition of Gateway Giving, LLC	—	—	(2,833)
Net cash (used in) provided by investing activities	(341,507)	72,929	(49,700)
Cash flows from financing activities:			
Net increase (decrease) in accounts and drafts payable	208,656	208,339	(21,875)
Short-term borrowings	—	(18,000)	18,000
Cash dividends paid	(15,446)	(15,599)	(15,234)
Purchase of common shares for treasury	(30,997)	(6,825)	(7,799)
Other financing activities, net	(850)	(1,098)	(1,125)
Net cash provided by (used in) financing activities	161,363	166,817	(28,033)
Net increase (decrease) in cash and cash equivalents	(154,531)	266,911	(50,681)
Cash and cash equivalents at beginning of year	287,166	20,255	70,936
Cash and cash equivalents at end of year	$ 132,635	$ 287,166	$ 20,255

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Cass Information Systems, Inc.:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of Cass Information Systems, Inc. and subsidiaries (the Company) as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income, cash flows, and shareholders' equity for each of the years in the three-year period ended December 31, 2021, and the related notes (collectively, the consolidated financial statements). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2021 and 2020, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2021, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission, and our report dated February 28, 2022 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

Change in Accounting Principle

As discussed in Note 1 to the consolidated financial statements, the Company has changed its method of accounting for the allowance for credit losses as of January 1, 2020 due to the adoption of ASU No. 2016-13, Financial Instruments - Credit Losses (ASC Topic 326). As explained below, auditing the Company's allowance for credit losses on loans was a critical audit matter.

Basis for Opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

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

Assessment of the qualitative risk factors related to the allowance for credit losses on loans evaluated on a collective basis

As discussed in Notes 1 and 4 to the consolidated financial statements, the Company's allowance for credit losses as of December 31, 2021 was $12.0 million, of which $12.0 million was related to the allowance for credit losses on loans evaluated on a collective basis (the "collective ACL"). The December 31, 2021 collective ACL includes the measure of expected credit losses on a collective (pooled) basis for those loans that share similar risk characteristics. The Company estimated the collective ACL using a weighted-average remaining maturity ("WARM") model that utilizes expected annual remaining loan balance, historical loss rates, a reasonable and supportable forecast, and reversion adjustments. Additionally, the collective ACL includes subjective qualitative risk factors that are likely to cause estimated credit losses to differ from historical experience. Given the Company's recent historical loss experience, the impact of the qualitative risk factors related to the collective ACL is a substantial percentage of the overall collective ACL. These qualitative risk factors may increase or reduce reserve levels and include adjustments for assumptions related to loan concentrations, lending management experience and risk tolerance, loan review and audit results, asset quality and portfolio trends, value of underlying collateral, and loan portfolio growth.

We identified the assessment of the qualitative risk factors related to the collective ACL as a critical audit matter. A high degree of audit effort, including specialized skills and knowledge, and subjective and complex auditor judgment was involved in the assessment due to significant measurement uncertainty. Specifically, the assessment encompassed the evaluation of the qualitative risk factors related to the collective ACL methodology, including the conceptual soundness and performance of the qualitative framework. The assessment also included the evaluation of qualitative risk factors and the related assumptions. These qualitative risk factors and related assumptions are sensitive to variation, such that minor changes in the assumption can cause significant changes in the estimates.

The following are the primary procedures we performed to address this critical audit matter. We evaluated the design and tested the operating effectiveness of certain internal controls related to the Company's measurement of the qualitative risk factors related to the collective ACL estimate, including controls over the:

- development of the collective ACL methodology
- identification and determination of the assumptions used in the qualitative framework
- continued use and appropriateness of changes made to the qualitative framework
- analysis of the collective ACL results, trends, and ratios

We evaluated the Company's process to develop the qualitative risk factors related to the collective ACL estimate by testing certain sources of data, factors, and assumptions that the Company used, and considered the relevance and reliability of such data, factors, and assumptions. In addition, we involved credit risk professionals with specialized skills and knowledge, who assisted in:

- evaluating the Company's collective ACL methodology for compliance with U.S. generally accepted accounting principles
- evaluating judgments made by the Company relative to the assessment of the qualitative framework by comparing it to relevant Company-specific metrics and trends and the applicable industry and regulatory practices
- evaluating the qualitative framework used to develop the qualitative risk factors and the effect of those factors on the collective ACL compared with relevant credit risk factors and consistency with credit trends and identified limitations of the underlying quantitative models.

/s/ KPMG LLP

We have served as the Company's auditor since 1983.

St. Louis, Missouri
February 28, 2022

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), as of December 31, 2021. Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of December 31, 2021.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rules 13a-15(f) and 15d-15(f). All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentations.

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under this framework, our management concluded that our internal control over financial reporting was effective as of December 31, 2021.

There have not been changes in our internal control over financial reporting that occurred during our fourth fiscal quarter that have materially affected or are reasonably likely to materially affect our internal control over financial reporting.

The effectiveness of our internal control over financial reporting as of December 31, 2021 has been audited by KPMG LLP, our independent registered public accounting firm. KPMG LLP's report, which expresses an unqualified opinion on the effectiveness of our internal control over financial reporting as of December 31, 2021, is included below.

Report of Independent Registered Public Accounting Firm

To the Shareholders and Board of Directors
Cass Information Systems, Inc.:

Opinion on Internal Control Over Financial Reporting

We have audited Cass Information Systems, Inc. and subsidiaries' (the Company) internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2021, based on criteria established in Internal Control – Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated balance sheets of the Company as of December 31, 2021 and 2020, the related consolidated statements of income, comprehensive income, cash flows, and shareholders' equity, for each of the years in the three-year period ended December 31, 2021, and the related notes (collectively, the consolidated financial statements), and our report dated February 28, 2022 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

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

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

/s/ KPMG LLP

St. Louis, Missouri
February 28, 2022

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

Not applicable.

PART III.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Certain information required by this Item 10 is incorporated herein by reference to the following sections of the Company's definitive Proxy Statement for its 2022 Annual Meeting of Shareholders (the "2022 Proxy Statement"), a copy of which will be filed with the SEC no later than 120 days after the close of the fiscal year: "Election of Directors – Proposal 1," "Executive Compensation and Related Information," and "Beneficial Ownership of Securities."

The Company has adopted a Code of Conduct and Business Ethics policy, applicable to all Company directors, executive officers and employees. The policy is publicly available and can be viewed on the Company's website at www.cassinfo.com. The Company intends to satisfy the disclosure requirement under Item 5.05 of Form 8-K regarding the amendment to, or a waiver of, a provision of this policy that applies to the Company's principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions, and that relates to any element of the code of ethics definition enumerated in Item 406(b) of Regulation S-K by posting such information on its website.

There were no material changes to the procedures by which shareholders may recommend nominees to the Board during the fourth quarter of fiscal 2021.

ITEM 11. EXECUTIVE COMPENSATION

Certain information required pursuant to this Item 11 is incorporated herein by reference to the sections entitled "Election of Directors – Proposal 1" and "Executive Compensation and Related Information" of the Company's 2022 Proxy Statement, a copy of which will be filed with the SEC no later than 120 days after the close of the fiscal year.

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

Information required pursuant to this Item 12 is incorporated herein by reference to the section entitled "Beneficial Ownership of Securities" of the Company's 2022 Proxy Statement, a copy of which will be filed with the SEC no later than 120 days after the close of the fiscal year.

Securities Authorized for Issuance under Equity Compensation Plans

The following information is as of December 31, 2021:

Plan Category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders (1)(2)	398,893	$ 42.45	249,537
Equity compensation plans not approved by security holders	—	—	—
Total	398,893	$ 42.45	249,537

(1) Amount disclosed relates to awards issued under the Amended and Restated Omnibus Stock and Performance Compensation Plan (the "Omnibus Plan").

(2) Includes restricted stock units, restricted stock, SARs, and performance-based stock. Performance-based stock is included assuming 100% attainment of the targets. The actual number of shares of performance-based stock to be awarded at the end of applicable performance periods ranges from 0% to 150% of the target amount awarded depending on the Company's achievement of pre-established financial goals.

Refer to Note 11 to the consolidated financial statements for information concerning the Omnibus Plan.

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

Information required by this Item 13 is incorporated herein by reference to the section entitled “Election of Directors – Proposal 1” of the Company’s 2022 Proxy Statement, a copy of which will be filed with the SEC no later than 120 days after the close of the fiscal year.

ITEM 14. PRINCIPAL ACCOUNTANT FEES AND SERVICES

Information concerning our principal accountant’s fees and services is incorporated herein by reference to the section entitled “Ratification of Appointment of Independent Registered Public Accounting Firm – Proposal 3” of the Company’s 2022 Proxy Statement, a copy of which will be filed with the SEC no later than 120 days after the close of the fiscal year.

PART IV.

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES

(a) The following documents are incorporated by reference in or filed as an exhibit to this report:

(1) and (2) Financial Statements and Financial Statement Schedules
Included in Item 8 of this report.

(3) Exhibits listed under (b) of this Item 15.

(b) Exhibits

3.1	Restated Articles of Incorporation of Registrant, incorporated by reference to Exhibit 4.1 to Form S-8 Registration Statement No. 333-44499, filed with the SEC on January 20, 1998.
3.2	Amendment to Restated Articles of Incorporation, incorporated by reference to Exhibit 3.1 to the current report on Form 8-K, filed with the SEC on April 19, 2013.
3.3	Articles of Merger of Cass Commercial Corporation, incorporated by reference to Exhibit 3.1 to the quarterly report on Form 10-Q for the quarter ended September 30, 2006.
3.4	Second Amended and Restated Bylaws of Registrant, incorporated by reference to Exhibit 3.1 to the current report on Form 8-K, filed with the SEC on July 21, 2016.
4.1	Description of the Registrant's securities, incorporated by reference to Exhibit 4.1 to the Annual report on Form 10-K filed with the SEC on February 28, 2020.
10.1	Form of Directors' Indemnification Agreement, incorporated by reference to Exhibit 10.1 to the quarterly report on Form 10-Q for the quarter ended March 31, 2003.*
10.2	Amended and Restated Omnibus Stock and Performance Compensation Plan, incorporated by reference to Exhibit 10.1 to the current report on Form 8-K, filed with the SEC on April 19, 2013.*
10.3	Amendment and Restatement of the Supplemental Executive Retirement Plan, incorporated by reference to Exhibit 10.2 to the quarterly report on Form 10-Q for the quarter ended September 30, 2007.*
10.4	Form of Stock Appreciation Rights Award Agreement, incorporated by reference to Exhibit 10.4 to the quarterly report on Form 10-Q for the quarter ended September 30, 2007.*
10.5	Form of Restricted Stock Award Agreement, incorporated by reference to Exhibit 10.8 to the annual report on Form 10-K for the year ended December 31, 2016.*
10.6	Form of Restricted Stock Unit Agreement, incorporated by reference to Exhibit 10.9 to the annual report on Form 10-K for the year ended December 31, 2016.*

10.7	Description of Cass Information Systems, Inc. Profit Sharing Program, incorporated by reference to Exhibit 10.7 to the annual report on Form 10-K for the year ended December 31, 2021.*
21	Subsidiaries of registrant.
23	Consent of Independent Registered Public Accounting Firm.
31.1	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document.
101.SCH	XBRL Taxonomy Extension Schema Document.
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document.
101.LAB	XBRL Taxonomy Extension Label Linkbase Document.
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document.
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document.
104	Cover Page Interactive Data File

* Management contract or compensatory plan arrangement

(c) None.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

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

CASS INFORMATION SYSTEMS, INC.

Date: February 28, 2022	By	/s/ Eric H. Brunngraber
		Eric H. Brunngraber Chairman and Chief Executive Officer (Principal Executive Officer)
Date: February 28, 2022	By	/s/ Michael J. Normile
		Michael J. Normile Executive Vice President and Chief Financial Officer (Principal Financial and Accounting Officer)

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below on the dates indicated by the following persons on behalf of the registrant and in their capacity as a member of the Board of Directors of the Company.

Date: February 28, 2022	By	/s/ Eric H. Brunngraber
		Eric H. Brunngraber
Date: February 28, 2022	By	/s/ Ralph W. Clermont
		Ralph W. Clermont
Date: February 28, 2022	By	/s/ Robert A. Ebel
		Robert A. Ebel
Date: February 28, 2022	By	/s/ Benjamin F. Edwards, IV
		Benjamin F. Edwards, IV
Date: February 28, 2022	By	/s/ Wendy J. Henry
		Wendy J. Henry
Date: February 28, 2022	By	/s/ James J. Lindemann
		James J. Lindemann
Date: February 28, 2022	By	/s/ Sally H. Roth
		Sally H. Roth
Date: February 28, 2022	By	/s/ Joseph D. Rupp
		Joseph D. Rupp
Date: February 28, 2022	By	/s/ Randall L. Schilling
		Randall L. Schilling
Date: February 28, 2022	By	/s/ Franklin D. Wicks, Jr.
		Franklin D. Wicks, Jr.

Shareholder Information

CORPORATE HEADQUARTERS
Cass Information Systems, Inc.
12444 Powerscourt Drive, Suite 550
Saint Louis, Missouri 63131
314-506-5500
cass@cassinfo.com
www.cassinfo.com

COMMON STOCK
The company's common stock trades on the NASDAQ stock market under the symbol CASS.

ANNUAL MEETING
The annual meeting of shareholders will be held April 19, 2022 at 8:30 a.m. at the Cass office at 13001 Hollenberg Drive, Bridgeton, Missouri 63044.

No presentations are planned.

INVESTOR RELATIONS
Security analysts, investment managers and others seeking financial information about the Company should contact:

Investor Relations Department
Cass Information Systems, Inc.
12444 Powerscourt Drive, Suite 550
Saint Louis, Missouri 63131
314-506-5500

INDEPENDENT AUDITORS
KPMG LLP
10 South Broadway, Suite 900
Saint Louis, Missouri 63102

TRANSFER AGENT
Shareholder correspondence should be mailed to:

Computershare
P.O. Box 505000
Louisville, KY 40233

Overnight correspondence should be mailed to:

Computershare
462 South 4th Street, Suite 1600
Louisville, KY 40202

SHAREHOLDER WEBSITE:
www.computershare.com/investor

SHAREHOLDER ONLINE INQUIRIES:
https://www-us.computershare.com/investor/Contact

TOLL-FREE PHONE:
866-323-8170

Board of Directors

Eric H. Brunngraber
Chairman and Chief Executive Officer

Ralph W. Clermont
Retired Managing Partner, KPMG LLP, Saint Louis, Missouri

Robert A. Ebel
Retired Chief Executive Officer, Universal Printing Company

Benjamin F. (Tad) Edwards, IV
Chairman, Chief Executive Officer, and President, Benjamin F. Edwards & Company

Wendy J. Henry
Retired Managing Partner, BKD, LLP

James J. Lindemann
Retired Executive Vice President, Emerson

Sally H. Roth
Retired Area President — Upper Midwest, Regions Bank

Joseph D. Rupp
Lead Director and Retired Chairman, President, and Chief Executive Officer, Olin Corporation

Randall L. Schilling
Chief Executive Officer, OPO Startups, LLC

Franklin D. Wicks, Jr., Ph.D.
Retired Executive Vice President and President, Applied Markets, Sigma-Aldrich

Leadership Council

Cory J. Bricker
Vice President, Integrated Financial Solutions

Eric H. Brunngraber
Chairman and Chief Executive Officer

Mark A. Campbell
President, Transportation Information Services

James M. Cavellier
Executive Vice President and Chief Information Officer

Dwight D. Erdbruegger
President, Cass Commercial Bank

Carl N. Friedholm
Vice President and General Manager, Telecom Expense Management

Nicole M. Jennings
Vice President, Internal Audit

Gary B. Langfitt
President, Expense Management Services

Teresa D. Meares
Vice President and General Manager, Waste Expense Management

Michael J. Normile
Executive Vice President and Chief Financial Officer

Christi A. Reiter
Vice President, Human Resources

Martin H. Resch
President and Chief Operating Officer

Jeanne M. Scannell
Chief Credit Officer, Cass Commercial Bank

Matthew S. Schuckman
Executive Vice President, General Counsel, and Corporate Secretary

Anthony G. Urban
Executive Vice President, Transportation Information Services

Cass Information Systems, Inc.

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