

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, 2022

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 63131

(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.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

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 \$520.7 million based on the closing price of the common stock of \$33.80 on June 30, 2022, as reported by The Nasdaq Global Select Market. As of February 15, 2023, the Registrant had 13,710,353 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 2023 Annual Meeting of Shareholders.

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

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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.

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 a church management software solution and 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 held businesses in the St. Louis metropolitan area and restaurant franchises and faith-based ministries within 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 TouchPoint offers a church management software solution and 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 CassPay operation, 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, restaurant franchises, 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®, ExpenseSmart®, ExpenseSmart®, TouchPoint®, Gyve®, Generosity Made Simple®, 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 940 full-time and 269 part-time employees as of February 15, 2023. Of these employees, the Bank had 70 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.

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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.

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.

In January 2022, the Company created a DEI Committee. The DEI Committee was formed after a thorough process of determining a charter and is actively in the process of expanding the Company's DEI vision. The committee members are passionate about DEI efforts and represent the Company's various business divisions and corporate departments. The Company continues to promote DEI within its culture and make improvements to human resources programs to support related initiatives. As of December 31, 2022, 70% of the Company's U.S. employees were female, and 23% were ethnically diverse. Within the management group, 47% were female, and 16% were ethnically diverse. Over the past year, the Company has continued to support and provide diversity training to all employees. The Company continues its commitment to providing a workplace that is free of harassment and discrimination by taking proactive measures and providing all employees with non-discrimination and sexual harassment prevention training on an annual basis. The DEI initiatives will continue to be supported and promoted to provide all employees a place where they feel welcomed, appreciated and valued.

Equal opportunities, anti-harassment, non-discrimination, the health and safety of employees and work-life balance are actively promoted as more fully described in the Company's Environmental, Social, and Governance report.

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

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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.

From time to time, the Company's Board of Directors has authorized stock repurchase plans. Bank holding companies must consult with the Federal Reserve before redeeming any equity or other capital instrument included in tier 1 or tier 2 capital prior to stated maturity, if such redemption could have a material effect on the level or composition of the organization's capital base. In addition, a bank holding company is unable to repurchase shares equal to 10% or more of its net worth if it would not be well-capitalized (as defined by the Federal Reserve) after giving effect to such repurchase. Bank holding companies experiencing financial weaknesses, or that are at significant risk of developing financial weaknesses, must consult with the Federal Reserve before redeeming or repurchasing common stock or other regulatory capital instruments.

In August 2022, the Inflation Reduction Act of 2022 (the "Inflation Reduction Act") was enacted. Among other things, the Inflation Reduction Act imposes a new 1% excise tax on the fair market value of stock repurchased after December 31, 2022 by publicly traded U.S. corporations. With certain exceptions, the value of stock repurchased is determined net of stock issued in the year, including shares issued pursuant to compensatory arrangements.

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:

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- 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 ratio 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 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.

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, 2022, 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 went into effect on January 1, 2023, 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.

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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 \$415,700, \$300,200 and \$152,500 for the years ended December 31, 2022, 2021 and 2020, respectively.

In October 2022, the FDIC adopted a final rule to increase the initial base deposit insurance assessment rate schedules uniformly by 2 basis points beginning with the first quarterly assessment period of 2023. The increased assessment is expected to improve the likelihood that the DIF reserve ratio would reach the statutory minimum of 1.35% by the statutory deadline prescribed under the FDIC’s amended restoration plan.

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, 2022, 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.

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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, 2022, 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.

On May 5, 2022, federal banking regulators requested comment on a joint notice of proposed rulemaking intended to strengthen and modernize the CRA regulations and framework. Until the proposed rulemaking is final and effective, the Company and the Bank will continue to operate under the CRA regulations currently in effect. At this time, it is uncertain what effect the impending CRA regulations will have on the Company and the Bank with respect to their CRA activities.

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 – Federal regulators regularly issue new and updated guidance and standards regarding cybersecurity intended to enhance cyber risk management among financial institutions and public companies generally. Financial institutions are expected to comply with such guidance and standards and develop appropriate risk management processes and security controls. If the Company fails to observe the regulatory guidance, it could be subject to various regulatory sanctions, including financial penalties.

Recently, 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.

Risks and exposures related to cybersecurity attacks, including litigation and enforcement risks, 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.

Bank Secrecy Act/Anti Money Laundering Regulation, USA PATRIOT Act and National Defense Authorization Act - The Bank Secrecy Act (“BSA”), the USA PATRIOT Act and other laws and regulations require financial institutions, among other duties, to institute and maintain an effective Anti Money Laundering (“AML”) program and to file timely reports such as suspicious activity reports and currency transaction reports. The Company is required to comply with these and other AML requirements. The federal banking agencies and the Financial Crimes Enforcement Network (“FinCEN”) are authorized to impose significant civil money penalties for violations of those requirements and have recently engaged in coordinated enforcement efforts against banks and other financial services providers with the Department of Justice, Drug Enforcement Administration and Internal Revenue Service. The Company is also subject to increased scrutiny of compliance with the rules enforced by the Office of Foreign Assets Control.

The USA PATRIOT Act gives federal agencies additional powers to address terrorist threats through enhanced domestic security measures, expanded surveillance powers, increased information sharing, and broadened AML requirements. The USA PATRIOT Act mandates that financial service companies implement additional policies and procedures and take heightened measures designed to address any or all of the following matters: customer identification programs, money laundering, terrorist financing, identifying and reporting suspicious activities and currency transactions, currency crimes, and cooperation between financial institutions and law enforcement authorities.

On January 1, 2021, Congress enacted the National Defense Authorization Act, which enacted the most significant overhaul of the BSA and related AML laws since the USA PATRIOT Act. Notable amendments include (i) significant changes to the collection of beneficial ownership information and the establishment of a beneficial ownership registry, which requires corporate entities (generally, any corporation, limited liability company or other similar entity with 20 or fewer employees and annual gross income of \$5 million or less) to report beneficial ownership information to FinCEN (which information will be maintained by FinCEN and made available upon request to financial institutions); (ii) enhanced whistleblower provisions, which provide that one or more whistleblowers who voluntarily provide original information

leading to the successful enforcement of violations of the AML laws in any judicial or administrative action brought by the Secretary of the Treasury or the Attorney General resulting in monetary sanctions exceeding \$1 million (including disgorgement and interest but excluding forfeiture, restitution, or compensation to victims) will receive not more than 30 percent of the monetary sanctions collected and will receive increased protections; (iii) increased penalties for violations of the BSA; (iv) improvements to existing information sharing provisions that permit financial institutions to share information relating to suspicious activity reports with foreign branches, subsidiaries, and affiliates (except those located in China, Russia, or certain other jurisdictions) for the purpose of combating illicit finance risks; and (v) expanded duties and powers of FinCEN. Many of the requirements included in the AML amendments will require additional rulemakings, reports and other measures, and the impact of these rules will depend on, among other things, rulemaking and implementation guidance. On December 8, 2021, FinCEN issued proposed regulations that would implement the amendments regarding beneficial ownership if adopted as proposed.

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.

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

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, global pandemics, natural disasters, risks related to climate change, 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.

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. Due in part to the increase in the Federal Funds rate throughout 2022, the Company's net interest margin increased to 2.74% in 2022 from 2.31% in 2021, therefore increasing net interest income. As discussed in greater detail in Item 7A, "Quantitative and Qualitative Disclosures about Market Risk," a decline in market interest rates would be expected to have a negative impact on the Company's net interest income.

The value of our goodwill and other intangible assets may decline in the future

As of December 31, 2022, the Company had \$21.4 million of goodwill and other intangible assets. A significant decline in the Company's expected future cash flows, a significant adverse change in the business climate, slower growth rates or a significant and sustained decline in the price of the Company's common stock may necessitate taking charges in the future related to the impairment of goodwill and other intangible assets which could have a material adverse effect on the Company's business, financial condition and results of operations.

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.

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

The United Kingdom's Financial Conduct Authority and the administrator of LIBOR have announced that the publication of the most commonly used U.S. dollar London Interbank Offered Rate ("LIBOR") settings will cease to be published or cease to be representative after June 30, 2023. The publication of all other LIBOR settings ceased to be published as of December 31, 2021. The Adjustable Interest Rate (LIBOR) Act, enacted in March 2022, provides a statutory framework to replace U.S. dollar LIBOR with a benchmark rate based on the Secured Overnight Financing Rate ("SOFR") for contracts governed by U.S. law that have no or ineffective fallbacks, and in December 2022, the Federal Reserve Board adopted related implementing rules. Although governmental authorities have endeavored to facilitate an orderly discontinuation of LIBOR, no assurance can be provided that this aim will be achieved or that the use, level, and volatility of LIBOR or other interest rates or the value of LIBOR-based securities will not be adversely affected. As a result, and despite the enactment of the LIBOR Act, for the most commonly used LIBOR settings, the use or selection of a successor rate could expose the Company to risks associated with disputes and litigation with customers and counterparties and other market participants in connection with implementing LIBOR fallback provisions.

While the Company does not currently originate loans tied to LIBOR, the Company has five loan relationships originated and/or purchased in prior periods that include attributes that are tied to LIBOR. Since proposed alternative rates are calculated differently, payments under contracts referencing new rates will differ from those referencing LIBOR. 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 i) disrupt the proper functioning of Cass' networks and systems and therefore operations and/or those of certain customers; ii) 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; iii) 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; iv) require significant management attention and resources to remedy the damages that result; or v) 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 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. Continuing deterioration in economic conditions, including the possibility of a recession, affecting borrowers and securities issuers; inflation; rising interest rates; new information regarding existing loans, credit commitments and securities holdings; the lingering effects of the COVID-19 pandemic or other global pandemics; natural disasters and risks related to climate change; and identification of additional problem loans, ratings down-grades and other factors, both within and outside of the Company's control, may require an increase in the allowances for credit losses on loans, securities and off-balance sheet credit exposures.

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.

Climate change could have a material negative impact on the Company and its clients

The Company's business, as well as the operations and activities of its clients, could be negatively impacted by climate change. Climate change presents both immediate and long-term risks to Cass and its clients and these risks are expected to increase over time. Climate change presents multi-faceted risks, including (i) operational risk from the physical effects of climate events on facilities and other assets as well as those of clients; (ii) credit risk from borrowers with significant exposure to climate risk; and (iii) reputational risk from stakeholder concerns about practices related to climate change, carbon footprint and business relationships with clients who operate in carbon-intensive industries. The Company's business, reputation and ability to attract and retain employees may also be harmed if the response to climate change is perceived to be ineffective or insufficient.

Climate change exposes Cass to physical risk as its effects may lead to more frequent and more extreme weather events, such as prolonged droughts or flooding, tornados, hurricanes, wildfires and extreme seasonal weather; and longer-term shifts, such as increasing average temperatures, ozone depletion and rising sea levels. Such events and long-term shifts may damage, destroy or otherwise impact the value or productivity of the Company's properties and other assets; reduce the availability of insurance; and/or disrupt operations and other activities through prolonged outages. Such events and long-term shifts may also have a significant impact on Cass customers, which could amplify credit risk by diminishing borrowers' repayment capacity or collateral values, and other businesses and counterparties with whom we transact, which could have a broader impact on the economy, supply chains and distribution networks.

Climate change also exposes Cass to transition risks associated with the transition to a less carbon-dependent economy. Transition risks may result from changes in policies; laws and regulations; technologies; and/or market preferences to address climate change. Such changes could materially, negatively impact our business, results of operations, financial condition and/or our reputation, in addition to having a similar impact on our clients. Cass has clients who operate in carbon-intensive industries that are exposed to climate risks, such as those risks related to the transition to a less carbon-

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dependent economy, as well as clients who operate in low-carbon industries that may be subject to risks associated with new technologies. Federal and state banking regulators and supervisory authorities, investors and other stakeholders have increasingly viewed financial institutions as important in helping to address the risks related to climate change both directly and with respect to their clients, which may result in financial institutions coming under increased pressure regarding the disclosure and management of their climate risks and related lending and investment activities. Given that climate change could impose systemic risks upon the financial sector, either via disruptions in economic activity resulting from the physical impacts of climate change or changes in policies as the economy transitions to a less carbon-intensive environment, the Company faces regulatory risk of increasing focus on the resilience to climate-related risks, including in the context of stress testing for various climate stress scenarios. Ongoing legislative or regulatory uncertainties and changes regarding climate risk management and practices may result in higher regulatory, compliance, credit and reputational risks and costs.

The Company is subject to Environmental, Social and Governance (“ESG”) risks that could adversely affect its reputation and the market price of its securities.

The Company is subject to a variety of risks arising from ESG matters. ESG matters include climate risk, hiring practices, the diversity of the work force, and racial and social justice issues involving the Company’s personnel, customers and third parties with whom it otherwise does business. Risks arising from ESG matters may adversely affect, among other things, reputation and the market price of the Company’s securities. Further, the Company may be exposed to negative publicity based on the identity and activities of those to whom it lends and with which it otherwise does business and the public’s view of the approach and performance of its customers and business partners with respect to ESG matters. Any such negative publicity could arise from adverse news coverage in traditional media and could also spread through the use of social media platforms. The Company’s relationships and reputation with its existing and prospective customers and third parties with which it does business could be damaged if it were to become the subject of any such negative publicity. This, in turn, could have an adverse effect on the Company’s ability to attract and retain customers and employees and could have a negative impact on the market price for securities. Investors have begun to consider the steps taken and resources allocated by financial institutions and other commercial organizations to address ESG matters when making investment and operational decisions. Certain investors are beginning to incorporate the business risks of climate change and the adequacy of companies’ responses to the risks posed by climate change and other ESG matters into their investment theses. These shifts in investing priorities may result in adverse effects on the market price of the Company’s securities to the extent that investors determine that the Company has not made sufficient progress on ESG matters.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 2. PROPERTIES

The Company leases office space in St. Louis County, Missouri, to house the headquarters of the Company and the Bank. The Company’s headquarters occupy 7,549 square feet in an office center at 12444 Powerscourt Drive. The Bank’s headquarters occupy 16,572 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 48,300 square feet located at 2675 Corporate Exchange Drive, Columbus, Ohio. Additional facilities are located in Greenville, South Carolina, Wellington, Kansas, Jacksonville, Florida, and Brighton, Michigan. 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 an additional leased facility in 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, 2023, there were approximately 5,405 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.

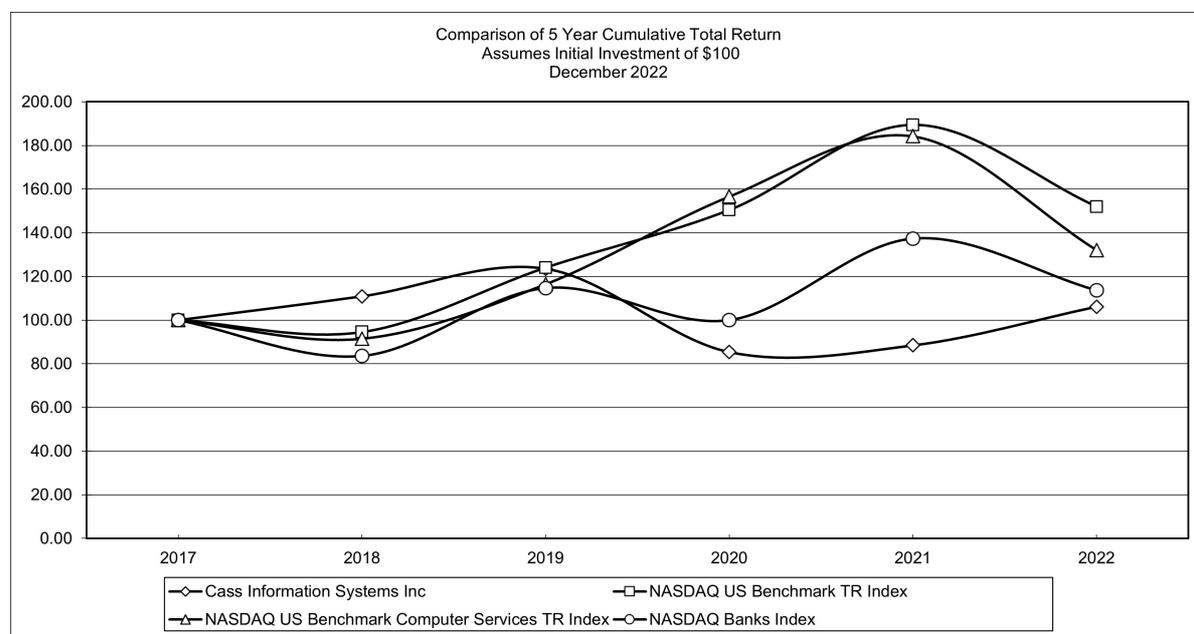
The Company maintains a treasury stock buyback program approved by the Board of Directors in October 2021 pursuant to which the Board of Directors has authorized the repurchase of up to 750,000 shares of the Company’s common stock and has no expiration date. The Company has repurchased 409,293 shares under this treasury stock buyback program and therefore has 340,707 shares remaining for repurchase.

The Company repurchased a total of 130,374 shares at an aggregate cost of \$5.3 million during the year ended December 31, 2022 and 713,857 shares at an aggregate cost of \$31.0 million during the year ended December 31, 2021. 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, 2022, the Company did not repurchase any shares of its common stock pursuant to its treasury stock buyback program.

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, 2017, 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 2022 compared to 2021. For discussion related to the results of operations and changes in financial condition for 2021 compared to 2020 refer to Part II, Item 7, "Management's Discussion and Analysis of Financial Condition and Results of Operations" in the Company's 2021 Annual Report on Form 10-K filed with the SEC on February 28, 2022.

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, transactional level payment services, 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. Transactional level payment services and interest income from the balances generated during the payment processing cycle are 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.

The Company recorded revenue of \$182.5 million in 2022, up 18.4% from the prior year, primarily due to an increase in transportation and facility dollar volumes processed and rising interest rates. Net income was \$34.9 million, and diluted EPS was \$2.53 per share, increases of 22.0% and 26.5% from the prior year, respectively.

The Company continues to operate profitably, posting a 1.35% return on average assets and 16.53% return on average equity. The Company's common equity Tier 1 capital ratio was 12.80% at December 31, 2022, significantly exceeding regulatory requirements. In addition, the Company has maintained exceptional credit quality with non-performing loans to total loans of 0.11% at December 31, 2022 and no loan charge-offs during the year ended December 31, 2022.

The Company's solid capital and liquidity positions, combined with ongoing earnings, are expected to continue to allow for investment in strategic opportunities when they become available, in addition to return of capital to shareholders. The Company delivered \$20.7 million in dividend payments and share repurchases during 2022. The Company continues to invest in the technology, processes, and people required to support its multi-national customer base.

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.

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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, 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.

Summary of Results

<i>(In thousands except per share data)</i>	For the Years Ended December 31,			% Change	
	2022	2021	2020	2022 v. 2021	2021 v. 2020
Processing fees	\$ 76,470	\$ 74,589	\$ 74,638	2.5 %	(0.1)%
Financial fees	43,757	32,733	23,107	33.7	41.7
Net interest income	58,844	44,326	45,325	32.8	(2.2)
Provision for (release of) credit losses	1,350	(130)	810	(1138.5)	(116.0)
Other	4,755	2,369	2,696	100.7	(12.1)
Total revenues	182,476	154,147	144,956	18.4	6.3
Operating expense	139,576	120,326	114,615	16.0	5.0
Income before income tax expense	42,900	33,821	30,341	26.8	11.5
Income tax expense	7,996	5,217	5,165	53.3	1.0
Net income	\$ 34,904	\$ 28,604	\$ 25,176	22.0	13.6
Diluted earnings per share	\$ 2.53	\$ 2.00	\$ 1.73	26.5	15.6
Return on average assets	1.35 %	1.23 %	1.29 %	—	—
Return on average equity	16.53 %	11.29 %	10.23 %	—	—

The Company recorded revenue of \$182.5 million in 2022, up 18.4% from the prior year, primarily due to an increase in transportation and facility dollar volumes processed and rising interest rates. Net income was \$34.9 million, and diluted EPS was \$2.53 per share, increases of 22.0% and 26.5% from the prior year, respectively.

The Company posted a 1.35% return on average assets and 16.53% return on average equity.

Further detail about the components of revenue and expenses are explained in the sections following.

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:

(In thousands)	December 31,			% Change	
	2022	2021	2020	2022 v. 2021	2021 v. 2020
Transportation invoice transaction volume	36,807	36,783	33,184	0.1 %	10.8 %
Transportation invoice dollar volume	\$ 44,749,359	\$ 36,829,841	\$ 26,516,803	21.5	38.9
Facility transaction volume ⁽¹⁾	12,990	12,499	12,572	3.9	(0.6)
Facility dollar volume ⁽¹⁾	\$ 19,514,049	\$ 15,867,556	\$ 13,458,231	23.0	17.9
Processing fees	\$ 76,470	\$ 74,589	\$ 74,638	2.5	(0.1)
Financial fees	\$ 43,757	\$ 32,733	\$ 23,107	33.7	41.7
Other fees	\$ 4,755	\$ 2,369	\$ 2,696	100.7	(12.1)

(1) Includes energy, telecom and environmental

Financial fees increased \$11.0 million, or 33.7%, in 2022 as a result of the increases in total invoice dollars processed and paid and a higher interest rate environment as compared to the prior year. Transportation and facility invoice dollars processed and paid increased 21.5% and 23.0%, respectively. The significant increase in dollars processed and paid was due to inflationary pressures and higher energy prices, among other factors.

Processing fees increased \$1.9 million, or 2.5%, during 2022 largely driven by a 3.9% increase in facility transaction volumes as well as an increase in fees received for ancillary processing services.

Other revenue increased \$2.4 million as compared to the prior year primarily due to the TouchPoint acquisition in June 2022 and increased bank service fees due to customer growth.

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:

(In thousands)	December 31,			% Change	
	2022	2021	2020	2022 v. 2021	2021 v. 2020
Average earning assets	\$ 2,205,792	\$ 1,999,609	\$ 1,674,297	10.3 %	19.4 %
Net interest income ⁽¹⁾	\$ 60,533	\$ 46,199	\$ 47,214	31.0	(2.1)
Net interest margin ⁽¹⁾	2.74 %	2.31 %	2.82 %	—	—
Yield on earning assets ⁽¹⁾	2.90 %	2.37 %	2.96 %	—	—
Rate on interest bearing liabilities	0.58 %	0.20 %	0.49 %	—	—

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

The increase in net interest income in 2022 compared to 2021 is primarily due to the Federal Reserve's actions to increase the Federal Funds rate throughout the year of 2022, positively affecting the net interest rate margin which increased to 2.74% as compared to 2.31% in the prior year. Additionally, a 10.3% increase in average earning assets contributed to the increase in net interest income. The yield on interest-earning assets increased 53 basis points from 2.37% in 2021 to 2.90% in 2022 while the cost of interest-bearing liabilities increased 38 basis points from 0.20% in 2021 to 0.58% in 2022.

Average loans increased \$104.3 million, or 11.8%, to \$992.0 million. This increase was due to solid loan growth during 2022, specifically in the Company's franchise restaurants, faith-based and lease financing receivables portfolios. These

increases were offset by a \$64.9 million decrease in average PPP loans as compared to 2021. The average yield on loans increased 2 basis points to 3.98% in 2022 as the increase in market interest rates was offset by a decline of \$2.4 million in PPP loan fees.

Average investment securities increased \$291.2 million, or 58.5%. The Company purchased investment securities throughout 2021 and 2022 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 tax-equivalent yield on investment securities in 2022 was consistent with 2021 at 2.30%.

Average short-term investments, consisting of interest-bearing deposits in other financial institutions and federal funds sold, decreased \$189.3 million, or 30.8%. The decrease is primarily a result of the increase in the average balances of investment securities, loans, payments in advance of funding and bank owned life insurance, partially offset by the increase in the average balances of deposits and accounts and drafts payable. The average yield on short-term investments increased 139 basis points to 1.51% in 2022 due to the increase in short-term market interest rates. The vast majority of these short-term investments are held at the Federal Reserve Bank.

Average interest-bearing deposits increased \$11.2 million, or 1.9%, and average non-interest-bearing demand deposits increased \$140.2 million, or 31.3%. These increases were largely due to organic growth within our customer base. The cost of interest-bearing deposits increased 38 basis points to 0.58% in 2022 as a result of the rising 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:

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(In thousands)	2022			2021			2020		
	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⁾ :	\$ 992,004	\$ 39,460	3.98 %	\$ 887,662	\$ 35,178	3.96 %	\$ 906,361	\$ 37,665	4.16 %
Securities ⁽⁴⁾ :									
Taxable	509,537	10,083	1.98	192,885	2,547	1.32	75,938	1,686	2.22
Tax-exempt ⁽³⁾	279,247	8,043	2.88	304,672	8,919	2.93	289,316	8,993	3.11
Certificates of deposit	—	—	—	—	—	—	255	6	2.35
Short-term investments	425,004	6,429	1.51	614,390	726	0.12	402,427	1,226	0.30
Total interest-earning assets	2,205,792	64,015	2.90	1,999,609	47,370	2.37	1,674,297	49,576	2.96
Non-interest-earning assets									
Cash and due from banks	20,772			21,220			16,979		
Premises and equipment, net	19,291			17,846			19,623		
Payments in excess of funding	278,185			211,809			160,692		
Bank owned life insurance	46,468			26,766			17,817		
Goodwill and other intangibles	19,558			17,273			18,132		
Unrealized (loss) gain on investment securities	(43,147)			15,833			18,368		
Other assets	51,686			35,231			37,218		
Allowance for credit losses	(12,527)			(11,595)			(11,016)		
Total assets	\$ 2,586,078			\$ 2,333,992			\$ 1,952,110		
Liabilities and Shareholders' Equity ⁽¹⁾									
Interest-bearing liabilities									
Interest-bearing demand deposits	\$ 549,054	\$ 3,118	0.57 %	\$ 521,409	\$ 582	0.11 %	\$ 398,585	\$ 1,313	0.33 %
Savings deposits	13,288	38	0.29	18,398	9	0.05	13,819	24	0.17
Time deposits >=\$250	18,272	181	0.99	14,576	139	0.95	20,036	267	1.33
Other time deposits	22,637	145	0.64	37,676	441	1.17	47,970	756	1.58
Total interest-bearing deposits	603,251	3,482	0.58	592,059	1,171	0.20	480,410	2,360	0.49
Short-term borrowings	11	—	—	10	—	—	61	2	3.28
Total interest-bearing liabilities	603,262	3,482	0.58	592,069	1,171	0.20	480,471	2,362	0.49
Noninterest-bearing liabilities									
Demand deposits	588,121			447,880			356,433		
Accounts and drafts payable	1,141,329			986,572			803,605		
Other liabilities	42,224			54,035			65,513		
Total liabilities	2,374,936			2,080,556			1,706,022		
Shareholders' equity	211,142			253,436			246,088		
Total liabilities and shareholders' equity	\$ 2,586,078			\$ 2,333,992			\$ 1,952,110		
Net interest income ⁽³⁾		\$ 60,533			\$ 46,199			\$ 47,214	
Net interest margin ⁽³⁾			2.74 %			2.31 %			2.82 %
Interest spread			2.32 %			2.17 %			2.47 %

- (1) Balances shown are daily averages.
- (2) Interest income on loans includes net loan fees of \$684,000, \$3.4 million, and \$3.6 million for 2022, 2021 and 2020, respectively. Loan fees include \$167,000, \$2.6 million, and \$3.1 million of PPP loan fees for 2022, 2021 and 2020, respectively.
- (3) Interest income is presented on a tax-equivalent basis assuming a tax rate of 21%. The tax-equivalent adjustment was approximately \$1.7 million for 2022 and \$1.9 million for each of 2021 and 2020.
- (4) 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.

<i>(In thousands)</i>	2022 Over 2021			2021 Over 2020		
	Volume ⁽¹⁾	Rate ⁽¹⁾	Total	Volume ⁽¹⁾	Rate ⁽¹⁾	Total
Increase (decrease) in interest income:						
Loans ⁽²⁾ :	\$ 4,150	\$ 132	\$ 4,282	\$ (766)	\$ (1,721)	\$ (2,487)
Securities:						
Taxable	5,780	1,756	7,536	1,761	(900)	861
Tax-exempt ⁽³⁾	(734)	(142)	(876)	463	(537)	(74)
Certificates of deposit	—	—	—	(6)	—	(6)
Short-term investments	(291)	5,994	5,703	256	(756)	(500)
Total interest income	\$ 8,905	\$ 7,740	\$ 16,645	\$ 1,708	\$ (3,914)	\$ (2,206)
Interest expense on:						
Interest-bearing demand deposits	\$ 32	\$ 2,504	\$ 2,536	\$ 318	\$ (1,049)	\$ (731)
Savings deposits	(3)	32	29	6	(21)	(15)
Time deposits >=\$250	36	6	42	(63)	(65)	(128)
Other time deposits	(139)	(157)	(296)	(143)	(172)	(315)
Short-term borrowings	—	—	—	(1)	(1)	(2)
Total interest expense	(74)	2,385	2,311	117	(1,308)	(1,191)
Net interest income	\$ 8,979	\$ 5,355	\$ 14,334	\$ 1,591	\$ (2,606)	\$ (1,015)

- (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) Interest income includes net loan fees.
- (3) 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 \$1.08 billion, representing 42.1% of the Company's total assets as of December 31, 2022 and generated \$39.5 million 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, 2022.

Loans by Type <i>(In thousands)</i>	December 31,		
	2022	2021	2020
Commercial and industrial	\$ 561,616	\$ 450,336	\$ 298,984
Real estate (commercial and faith-based):			
Mortgage	495,280	464,341	434,080
Construction	25,968	39,461	48,908
PPP	—	6,299	109,704
Other	42	130	—
Total loans	\$ 1,082,906	\$ 960,567	\$ 891,676

Loans by Maturity as of December 31, 2022

(In thousands)	One Year Or Less		Over 1 Year Through 5 Years		Over 5 Years Through 15 Years ⁽¹⁾		Total
	Fixed Rate	Floating Rate	Fixed Rate	Floating Rate	Fixed Rate	Floating Rate	
Commercial and industrial	\$ 13,708	\$ 42,342	\$ 256,197	\$ 24,189	\$ 221,287	\$ 3,893	\$ 561,616
Real Estate:							
Mortgage	20,904	7,142	304,823	15,915	133,617	12,879	495,280
Construction	8,096	13,136	950	3,786	—	—	25,968
PPP	—	—	—	—	—	—	—
Other	—	42	—	—	—	—	42
Total loans	\$ 42,708	\$ 62,662	\$ 561,970	\$ 43,890	\$ 354,904	\$ 16,772	\$ 1,082,906

(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. 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 \$122.3 million, or 12.7%, to \$1.08 billion at December 31, 2022. Lease finance receivables and franchise restaurant loans, which are both included in commercial and industrial loans, increased \$80.4 million, or 100.1%, and \$34.3 million, or 18.1%, respectively, during 2022. These increases were due to organic growth in an effort to expand these loan types. Faith-based mortgages increased \$31.7 million, or 8.9%, during 2022. These increases were partially offset by the decrease in PPP loans of \$6.3 million at December 31, 2021 to \$0 at December 31, 2022. 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 provision for credit losses and off-balance sheet credit exposures of \$1.4 million in 2022 and a release of credit losses of \$130,000 in 2021. The amount of the provision for (release of) credit losses was derived from the Company's CECL model. The amount of the provision will fluctuate as determined by these analyses. The Company had net loan recoveries of \$13,000 and \$27,000 in 2022 and 2021, respectively. The ACL was \$13.5 million at December 31, 2022 compared to \$12.0 million at December 31, 2021. The ACL represented 1.25% of outstanding loans at both December 31, 2022 and December 31, 2021. The allowance for unfunded commitments was \$232,000 at December 31, 2022 and \$367,000 at December 31, 2021. There was one nonperforming loan outstanding with an outstanding balance of \$1.2 million, or 0.11% of total loans, at December 31, 2022 and no nonperforming loans outstanding at December 31, 2021. The single nonperforming loan at December 31, 2022 paid off in full during January 2023.

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

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evaluated, the Company uses two impairment measurement methods: 1) the present value of expected future cash flows and 2) collateral values.

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

(In thousands)	December 31,				
	2022	2021	2020	2019	2018
Allowance at beginning of year	\$ 12,041	\$ 11,944	\$ 11,279	\$ 10,225	\$ 10,205
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	13	12	19	81	20
Real estate (commercial and faith-based):					
Mortgage	—	15	1	—	—
Construction	—	—	—	—	—
Other	—	—	—	—	—
Total recoveries of loans previously charged-off	13	27	20	81	20
Net loans recovered	(13)	(27)	(20)	(81)	(20)
Provision for credit losses	1,485	70	645	250	—
Allowance at end of year	\$ 13,539	\$ 12,041	\$ 11,944	\$ 10,556	\$ 10,225
Cumulative effect of accounting change (ASU 2016-13)	—	—	—	723	—
Allowance at beginning of next year	\$ 13,539	\$ 12,041	\$ 11,944	\$ 11,279	\$ 10,225
Allowance for unfunded commitments at beginning of year	\$ 367	\$ 567	\$ 402	\$ —	\$ —
(Release of) provision for credit losses	(135)	(200)	165	—	—
Allowance for unfunded commitments at end of year	232	367	567	—	—
Cumulative effect of accounting change (ASU 2016-13)	—	—	—	402	—
Allowance for unfunded commitments at beginning of next year	\$ 232	\$ 367	\$ 567	\$ 402	\$ —
Loans outstanding:					
Average	\$ 992,004	\$ 887,662	\$ 906,631	\$ 760,153	\$ 710,846
December 31	1,082,906	960,567	891,676	772,638	721,587
Ratio of allowance for credit losses to loans outstanding at December 31	1.25 %	1.25 %	1.34 %	1.37 %	1.42 %
Ratio of net recoveries to average loans outstanding	—	—	—	(0.01)%	—
Allocation of allowance for credit losses ⁽¹⁾ :					
Commercial and industrial	\$ 5,977	\$ 5,035	\$ 4,635	\$ 4,874	\$ 4,179
Real estate (commercial and faith-based):					
Mortgage	7,378	6,714	6,892	5,370	5,378
Construction	184	292	417	312	244
Other	—	—	—	—	424
Total	\$ 13,539	\$ 12,041	\$ 11,944	\$ 10,556	\$ 10,225
Percentage of categories to total loans:					
Commercial and industrial	51.9 %	46.9 %	33.5 %	41.9 %	38.4 %
Real estate (commercial and faith-based):					
Mortgage	45.7 %	48.3 %	48.7 %	52.8 %	57.1 %
Construction	2.4 %	4.1 %	5.5 %	5.3 %	4.5 %
PPP	— %	0.7 %	12.3 %	— %	— %
Other	— %	— %	— %	— %	— %
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 2022 and 2021.

There was one nonaccrual loan of \$1.2 million at December 31, 2022 and no nonaccrual loans at December 31, 2021. There were no foreclosed assets at December 31, 2022 or December 31, 2021. The single nonperforming loan at December 31, 2022 paid off in full during January 2023.

The Company does not have any foreign loans. The Company's loan portfolio includes \$212,000 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

<i>(In thousands)</i>	December 31,				
	2022	2021	2020	2019	2018
Commercial and industrial:					
Nonaccrual	\$ 1,150	\$ —	\$ —	\$ —	\$ —
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	\$ 1,150	\$ —	\$ —	\$ —	\$ —
Total foreclosed assets	—	—	—	—	—
Total nonperforming assets	\$ 1,150	\$ —	\$ —	\$ —	\$ —

Operating Expenses

Operating expenses in 2022 compared to 2021 and 2020 include the following significant pre-tax components:

<i>(In thousands)</i>	December 31,		
	2022	2021	2020
Personnel	\$ 106,474	\$ 92,155	\$ 88,062
Occupancy	3,676	3,824	3,739
Equipment	6,668	6,745	6,568
Amortization of intangible assets	680	859	859
Other operating	22,078	16,743	15,387
Total operating expense	\$ 139,576	\$ 120,326	\$ 114,615

Total operating expenses increased 16.0% in 2022 compared to 2021, primarily as a result of higher personnel and other operating expenses.

Personnel expense increased \$14.3 million, or 15.5%, to \$106.5 million as a result of merit increases, wage pressures, an increase in average full-time equivalent employees of 10.0% due to the TouchPoint acquisition and strategic investment in optical character recognition, artificial intelligence, machine learning and other processes to consume images and produce data. Also driving the increase in personnel expense was an increase in stock compensation and profit sharing due to improved Company earnings and the impact on performance based restricted stock. Stock compensation increased \$3.9 million and profit sharing increased \$1.4 million as compared to the prior year.

Other operating expense increased \$5.3 million, or 31.9%, to \$22.1 million as a result of higher levels of travel, business development, employee procurement, data processing, insurance, and other professional fees. Partially causing the increase in data processing, other professional fees, and other operating expenses are investments in technology initiatives, resulting in elevated expense levels as multiple technology platforms are being maintained prior to switching over to what the Company believes will be more efficient technology platforms for facility and freight data entry processing by the end of 2023.

Income Tax Expense

Income tax expense in 2022 totaled \$8.0 million, compared to \$5.2 million in 2021. When measured as a percent of pre-tax income, the Company's effective tax rate was 18.6% and 15.4% in 2022 and 2021, respectively. The increase in the effective tax rate in 2022 compared to 2021 was primarily due to changes in the levels of tax credits, tax-free interest

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income on municipal securities, and other miscellaneous book to tax true-ups upon filing of the Company's tax returns for the years ended December 31, 2021 and 2020.

Investment Portfolio

Investment securities increased \$81.0 million, or 12.0%, during 2022 to \$754.5 million at December 31, 2022. U.S. Treasury securities increased to \$155.3 million during 2022 compared to none held in 2021. State and political securities decreased \$76.0 million, or 20.5%, to \$295.1 million as a result of runoff in the portfolio and a decrease in fair value due to the change in market interest rates. 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 2022, the Company's purchase of investment securities totaled \$232.1 million.

There was no single issuer of securities in the investment portfolio at December 31, 2022 for which the aggregate amortized cost exceeded 10% of total shareholders' equity.

Investments by Type

<i>(In thousands)</i>	December 31,		
	2022	2021	2020
State and political subdivisions	\$ 295,126	\$ 371,128	\$ 305,974
Mortgage-backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	173,939	168,646	51,752
Corporate bonds	85,097	84,338	—
Asset-backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	45,023	49,341	—
Treasury securities	155,283	—	—
Total investments	\$ 754,468	\$ 673,453	\$ 357,726

Investment Securities by Maturity

(At December 31, 2022)

<i>(In thousands)</i>	Within 1 Year	Over 1 to 5 Years	Over 5 to 10 Years	Over 10 Years	Yield
State and political subdivisions	\$ 16,197	\$ 117,515	\$ 109,509	\$ 51,905	2.77 % ⁽¹⁾
Mortgage-backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	44	353	48,264	125,278	1.71 %
Corporate bonds	—	37,592	47,505	—	2.82 %
Asset-backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	—	—	—	45,023	4.32 %
Treasury securities	48,980	106,303	—	—	2.67 %
Total investments	\$ 65,221	\$ 261,763	\$ 205,278	\$ 222,206	2.57 %
Weighted average yield ⁽¹⁾	3.30 %	3.34 %	2.23 %	2.24 %	2.57 %

⁽¹⁾ Yields are presented on a tax-equivalent basis assuming a tax rate of 21%.

Deposits and Accounts and Drafts Payable

Noninterest-bearing demand deposits increased 10.3% to \$642.8 million at December 31, 2022 primarily as a result of an increase in balances related to CassPay customers. These balances can fluctuate significantly on a day to day basis. Interest-bearing deposits decreased \$24.4 million, or 3.8%, to \$614.5 million at December 31, 2022.

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Accounts and drafts payable generated by the Company in its payment processing operations increased \$17.2 million, or 1.6%, to \$1.07 billion, at December 31, 2022. 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 \$154.8 million, or 15.7%, to \$1.14 billion during 2022. The higher average accounts and drafts payable was due to a significant increase in dollars processed from inflationary pressures and higher energy prices, among other factors.

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, 2022

<i>(In thousands)</i>	\$100 or Less	\$100 to Less Than \$250	\$250 or More	Total
Three months or less	\$ 789	\$ 10,230	\$ 5,281	\$ 16,300
Three to six months	249	704	9,312	10,265
Six to twelve months	756	7,503	3,101	11,360
Over twelve months	732	1,700	264	2,696
Total	\$ 2,526	\$ 20,137	\$ 17,958	\$ 40,621

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 \$200.9 million at December 31, 2022, a decrease of \$314.0 million, or 61.0%, from December 31, 2021. The decrease during 2022 is primarily attributed to available cash being used for purchases of available-for-sale investment securities and to fund loan growth. At December 31, 2022, cash and cash equivalents represented 7.8% 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 \$754.5 million at December 31, 2022, an increase of \$81.0 million, or 12.0%, from December 31, 2021. Investment securities represented 29.3% of total assets at December 31, 2022. Of the total portfolio, 8.8% mature in one year or less, 34.6% mature after one year through five years and 56.6% mature after five years.

As of December 31, 2022, the Bank had unsecured lines of credit at six correspondent banks to purchase federal funds up to a maximum of \$83.0 million in aggregate. As of December 31, 2022, the Bank had secured lines of credit with the Federal Home Loan Bank of \$237.8 million collateralized by commercial mortgage loans. At December 31, 2022, the Company had lines of credit from three banks up to a maximum of \$200.0 million in aggregate collateralized by state and political subdivision securities. There were no amounts outstanding at December 31, 2022, and 2021 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 2022, 2021 and 2020 were \$51.6 million, \$34.5 million, and \$47.8 million, 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 2023. The Company anticipates the annual capital expenditures for 2023 should range from \$8 million to \$10 million. Capital expenditures in 2023 are expected to consist of equipment and software related to the payment and information processing services business.

Net income plus amortization of intangible assets, net amortization of premium/discount on investment securities and depreciation of premises and equipment was \$45.9 million and \$41.1 million for the years ended December 31, 2022 and 2021, respectively, an increase of \$4.8 million year over year. The increase was due to the increase in net income of \$6.3 million, partially offset by a decrease in net amortization of premium/discount on investment securities of \$1.1 million. The net amortization of premium/discount on investment securities is dependent on the type of securities purchased and changes in the prevailing market interest rate environment.

Other factors impacting the \$17.1 million increase in net cash provided by operating activities include:

- An increase in other operating activities, net of \$9.4 million, primarily due to changes in various accounts receivable and payable;
- An increase in stock-based compensation expense of \$3.9 million due to improved Company earnings and the impact on performance based stock; and
- A change in the provision for (release of) credit losses of \$1.5 million due to loan growth in 2022.

On an overall basis, the Company's \$17.1 million increase in net cash provided by operating activities was due to improved revenue and profitability largely due to higher financial fee revenue and net interest income. The improved revenue and profitability for 2022 is in large part due to a 33.7% increase in financial fees and 32.8% increase in net interest income. Financial fees increased as a result of an increase in total invoice dollars processed and paid and a higher interest rate environment as compared to the prior year. Transportation and facility invoice dollars processed and paid increased 21.5% and 23.0%, respectively. The significant increase in dollars processed and paid was due to inflationary pressures and higher energy prices, among other factors. The increase in net interest income in 2022 compared to 2021 is primarily due to the Federal Reserve's actions to increase the Federal Funds rate throughout the year of 2022, positively affecting the net interest rate margin which increased to 2.74% as compared to 2.31% in the prior year. Additionally, a 10.3% increase in average earning assets contributed to the increase in net interest income.

The Company generated net cash provided by operating activities of \$34.5 million and \$47.8 million for the years ended December 31, 2021 and 2020, respectively, a decrease of \$13.2 million.

Net income plus amortization of intangible assets, net amortization of premium/discount on investment securities and depreciation of premises and equipment was \$41.1 million and \$36.4 million for the years ended December 31, 2021 and 2020, respectively, an increase of \$4.7 million. The increase was largely due to the increase in net income of \$3.4 million in addition to an increase in net amortization of premium/discount on investment securities of \$1.4 million primarily resulting from the purchase of \$494.2 million of securities available-for-sale in 2021, typically at a premium given the prevailing low interest rate environment.

Other factors impacting the \$13.2 million decrease in net cash provided by operating activities include:

- An increase in the change in the pension liability of \$6.2 million primarily due to the investment performance of the pension assets and changes in other actuarial assumptions, including the discount rate;
- A change in other operating activities, net, of \$10.1 million primarily due to a \$5.0 million change associated with payroll taxes deferred under the CARES Act in 2020 that were paid in 2021, and the receipt of PPP fees from the SBA in 2020 that were recognized into interest income in 2021 resulting in a \$3.6 million change; partially offset by:
 - An increase in stock-based compensation expense of \$592,000 due to an increase in the fair value of restricted stock grants to personnel and improved company performance; and
 - A change in the (release of) provision for credit losses of \$940,000 due to improved credit quality.

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On an overall basis, despite the \$13.2 million decrease in net cash provided by operating activities, the Company generated a higher level of cash from operating activities in 2021 due to improved revenue and profitability, partially offset by an increase in the negative impact of noncash items. The improved revenue and profitability for 2021 is in large part due to a 38.9% increase in dollars processed in transportation due to supply chain disruptions, fuel surcharges, and scarcity of carrier supply experienced throughout the market generally in 2021, among other factors.

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, inflation, 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 2022, 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, 2022 as shown in Item 8, Note 2 of this report.

Cash dividends paid were \$15.4 million in each of 2022 and 2021.

Shareholders' equity was \$206.3 million, or 8.0% of total assets, at December 31, 2022, a decrease of \$39.5 million as compared to December 31, 2021. The decrease was primarily a result of an increase in accumulated other comprehensive loss of \$59.8 million due to the change in market values on investment securities as a result of the rising interest rate environment, the payment of cash dividends of \$15.4 million, and the repurchase of treasury shares of \$5.3 million, partially offset by net income of \$34.9 million.

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 2022, the Bank paid dividends of \$15.0 million to the Company. As of December 31, 2022,

unappropriated retained earnings of \$29.2 million 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. A total of 340,707 shares remain under the buyback program at December 31, 2022.

The Company repurchased a total of 130,374 shares at an aggregate cost of \$5.3 million during the year ended December 31, 2022 and 713,857 shares at an aggregate cost of \$31.0 million during the year ended December 31, 2021. 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 and 2022, supply chain disruption, rising energy prices 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, the Federal Reserve has increased the Federal Funds rate over the course of 2022 and into the first quarter of 2023. The increase in the Federal Funds rate has contributed to the increase in the Company's net interest margin to 2.74% in 2022 from 2.31% in 2021, therefore positively impacting net interest income. There can be no assurance that further increases in the Federal Funds rate will occur, and the Company continues to monitor such impact to its future levels of net interest income.

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, 2022, an allowance for unfunded commitments of \$232,000 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, 2022, the balance of loan commitments, standby and commercial letters of credit were \$237.0 million, \$14.5 million and \$354,000, 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.

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During 2022, the Company did not make a contribution 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 2022, these assumptions were as follows:

Assumption	Rate
Weighted average discount rate	2.85 %
Expected long-term rate of return on assets	6.00 %

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 and an increasing net interest margin in periods of rising interest rates, like the Company is currently experiencing.

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, 2022, 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, 2022:

Change in Interest Rates	% Change in Net Interest Income
+200 basis points	10.6%
+100 basis points	4.2
-100 basis points	—
-200 basis points	(1.5)

The Company is generally asset sensitive as average interest-earning assets of \$2.21 billion for 2022 greatly exceeded average interest-bearing liabilities of \$603.3 million. The table above on the projected impact of interest rate shocks results from a static balance sheet at December 31, 2022. On an average balance basis, the percent change in net interest income generally is higher to the positive for a rising interest rate environment and more negative for a declining interest rate environment. Since the Company held fewer short-term investments (\$179.9 million) on its ending balance sheet at December 31, 2022 than its average balance for full year 2022 of \$425.0 million, the percent changes in net interest income are not necessarily representative of what would occur in a changing interest rate environment as these short-term investments are floating rate assets. The Company's cash position can vary significantly on a day to day basis.

ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA
**CASS INFORMATION SYSTEMS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS**

<i>(In thousands except share and per share data)</i>	December 31,	
	2022	2021
Assets		
Cash and due from banks	\$ 20,995	\$ 12,301
Short-term investments	179,947	502,627
Cash and cash equivalents	200,942	514,928
Securities available-for-sale, at fair value	754,468	673,453
Loans	1,082,906	960,567
Less allowance for credit losses	13,539	12,041
Loans, net	1,069,367	948,526
Payments in advance of funding	293,775	291,427
Premises and equipment, net	19,958	18,113
Investments in bank-owned life insurance	47,998	43,176
Goodwill	17,309	14,262
Other intangible assets, net	4,126	2,564
Accounts and drafts receivable from customers	95,779	4,992
Other assets	69,301	43,460
Total assets	\$ 2,573,023	\$ 2,554,901
Liabilities and Shareholders' Equity		
Liabilities:		
Deposits		
Noninterest-bearing	\$ 642,757	\$ 582,642
Interest-bearing	614,460	638,861
Total deposits	1,257,217	1,221,503
Accounts and drafts payable	1,067,600	1,050,396
Other liabilities	41,881	37,204
Total liabilities	2,366,698	2,309,103
Shareholders' Equity:		
Preferred stock, par value \$0.50 per share; 2,000,000 shares authorized and no shares issued	—	—
Common stock, par value \$0.50 per share; 40,000,000 shares authorized; 15,505,772 shares issued at December 31, 2022 and 2021; 13,669,656 and 13,734,295 shares outstanding at December 31, 2022 and 2021, respectively.	7,753	7,753
Additional paid-in capital	207,422	204,276
Retained earnings	131,682	112,220
Common shares in treasury, at cost (1,836,116 shares at December 31, 2022 and 1,771,477 shares at December 31, 2021, respectively)	(81,211)	(78,904)
Accumulated other comprehensive (loss) income	(59,321)	453
Total shareholders' equity	206,325	245,798
Total liabilities and shareholders' equity	\$ 2,573,023	\$ 2,554,901

See accompanying notes to consolidated financial statements.

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

<i>(In thousands except per share data)</i>	For the Years Ended December 31,		
	2022	2021	2020
Fee Revenue and Other Income:			
Processing fees	\$ 76,470	\$ 74,589	\$ 74,638
Financial fees	43,757	32,733	23,107
Other	4,755	2,369	2,696
Total fee revenue and other income	124,982	109,691	100,441
Interest Income:			
Interest and fees on loans	39,460	35,178	37,665
Interest and dividends on securities:			
Taxable	10,083	2,547	1,692
Exempt from federal income taxes	6,354	7,046	7,104
Interest on federal funds sold and other short-term investments	6,429	726	1,226
Total interest income	62,326	45,497	47,687
Interest Expense:			
Interest on deposits	3,482	1,171	2,360
Interest on short-term borrowings	—	—	2
Total interest expense	3,482	1,171	2,362
Net interest income	58,844	44,326	45,325
Provision for (release of) credit losses	1,350	(130)	810
Net interest income after provision for (release of) credit losses	57,494	44,456	44,515
Total net revenue	182,476	154,147	144,956
Operating Expense:			
Personnel	106,474	92,155	88,062
Occupancy	3,676	3,824	3,739
Equipment	6,668	6,745	6,568
Amortization of intangible assets	680	859	859
Other operating	22,078	16,743	15,387
Total operating expense	139,576	120,326	114,615
Income before income tax expense	42,900	33,821	30,341
Income tax expense	7,996	5,217	5,165
Net income	\$ 34,904	\$ 28,604	\$ 25,176
Basic Earnings Per Share	\$ 2.58	\$ 2.03	\$ 1.75
Diluted Earnings Per Share	2.53	2.00	1.73

See accompanying notes to consolidated financial statements.

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

<i>(In thousands)</i>	For the Years Ended December 31,		
	2022	2021	2020
Comprehensive Income:			
Net income	\$ 34,904	\$ 28,604	\$ 25,176
Other comprehensive (loss) income:			
Net unrealized (loss) gain on securities available-for-sale	(79,746)	(10,447)	6,689
Tax effect	18,981	2,487	(1,592)
Reclassification adjustments for gains included in net income	(15)	(51)	(1,075)
Tax effect	3	12	256
FASB ASC 715 pension adjustment	1,504	11,363	12,548
Tax effect	(358)	(2,705)	(2,987)
Foreign currency translation adjustments	(143)	(191)	66
Other comprehensive (loss) income	(59,774)	468	13,905
Total comprehensive (loss) income	\$ (24,870)	\$ 29,072	\$ 39,081

See accompanying notes to consolidated financial statements.

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

<i>(In thousands)</i>	For the Years Ended December 31,		
	2022	2021	2020
Cash Flows From Operating Activities:			
Net income	\$ 34,904	\$ 28,604	\$ 25,176
Adjustments to reconcile net income to net cash provided by operating activities:			
Amortization of intangible assets	680	859	859
Net amortization of premium/discount on investment securities	6,275	7,328	5,939
Depreciation	4,021	4,313	4,471
Gains on sales of securities	(15)	(51)	(1,075)
Stock-based compensation expense	6,732	2,859	2,267
Provision for (release of) credit losses	1,350	(130)	810
Deferred income tax benefit	(1,163)	(698)	(874)
Increase in current income tax liability	724	206	1,237
(Decrease) increase in pension liability	(2,484)	(1,811)	4,423
(Increase) decrease in accounts receivable	(2,520)	(602)	756
Other operating activities, net	3,104	(6,330)	3,792
Net cash provided by operating activities	51,608	34,547	47,781
Cash Flows From Investing Activities:			
Proceeds from sales of securities available-for-sale	3,838	63,774	21,943
Proceeds from maturities of securities available-for-sale	61,209	96,951	63,789
Purchases of securities available-for-sale	(232,083)	(494,226)	(20,043)
Net increase in loans	(122,326)	(68,664)	(119,183)
Purchase of bank-owned life insurance	(4,000)	(25,119)	—
(Increase) decrease in payments in advance of funding	(2,348)	(96,864)	11,595
Purchases of premises and equipment, net	(5,866)	(4,369)	(2,001)
Asset acquisition of TouchPoint	(4,814)	—	—
Net cash used in investing activities	(306,390)	(528,517)	(43,900)
Cash Flows From Financing Activities:			
Net increase in noninterest-bearing demand deposits	60,115	89,138	142,413
Net (decrease) increase in interest-bearing demand and savings deposits	(17,838)	90,310	166,289
Net decrease in time deposits	(6,563)	(8,801)	(14,982)
Net (increase) decrease in accounts and drafts receivable from customers	(90,787)	6	59,404
Net increase in accounts and drafts payable	17,204	215,010	151,091
Net decrease in short-term borrowings	—	—	(18,000)
Cash dividends paid	(15,442)	(15,446)	(15,599)
Purchase of common shares for treasury	(5,299)	(30,997)	(6,825)
Other financing activities, net	(594)	(850)	(1,098)
Net cash (used in) provided by financing activities	(59,204)	338,370	462,693
Net (decrease) increase in cash and cash equivalents	(313,986)	(155,600)	466,574
Cash and cash equivalents at beginning of year	514,928	670,528	203,954
Cash and cash equivalents at end of year	\$ 200,942	\$ 514,928	\$ 670,528
Supplemental information:			
Cash paid for interest	\$ 3,431	\$ 1,194	\$ 2,426
Cash paid for income taxes	8,396	5,637	4,732

See accompanying notes to consolidated financial statements.

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

<i>(In thousands except per share data)</i>	Common Stock	Additional Paid-in Capital	Retained Earnings	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total
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
Net income			34,904			34,904
Cash dividends (\$1.13 per share)			(15,442)			(15,442)
Issuance of 82,172 common shares pursuant to stock-based compensation plan, net		(2,727)		2,414		(313)
Exercise of SARs		(859)		578		(281)
Stock-based compensation expense		6,732				6,732
Purchase of 130,374 common shares				(5,299)		(5,299)
Other comprehensive loss					(59,774)	(59,774)
Balance, December 31, 2022	\$ 7,753	\$ 207,422	\$ 131,682	\$ (81,211)	\$ (59,321)	\$ 206,325

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 2021 and 2020 consolidated financial statements have been reclassified to conform to the 2022 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* ("ASC 326").

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.

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 ASC 326. 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 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 of the loan portfolio 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.

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.

Processing Fees A majority of the Company's fee revenue is attributable to 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.

Financial 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.

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.

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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, 2022, rate of increase in 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 March 2022, the FASB issued 2022-02, *Financial Instruments – Credit Losses (Topic 326): Troubled Debt Restructurings and Vintage Disclosures* ("ASU 2022-02"). This ASU eliminates the accounting guidance for troubled debt restructurings by creditors that have adopted the CECL methodology for estimating allowances for credit losses and enhances the disclosure requirements for loan restructurings made with borrowers experiencing financial difficulty. In addition, the amendments require a public business entity to disclose current period gross charge-offs for financing receivables and net investment in leases by year of origination in the vintage disclosures. ASU 2022-02 is effective for fiscal years beginning after December 15, 2022, including interim periods within those fiscal years. The Company does not expect implementation of this ASU to have a material impact on the consolidated financial statements.

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, 2022 and 2021, 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, 2022, 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, 2022, unappropriated retained earnings of \$29.2 million 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, 2022 and 2021.

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

<i>(In thousands)</i>	Actual		Capital Requirements		Requirement to be Well-Capitalized	
	Amount	Ratio	Amount	Ratio	Amount	Ratio
At December 31, 2022						
Total capital (to risk-weighted assets)						
Cass Information Systems, Inc.	\$ 257,313	13.52 %	\$ 152,306	8.00 %	\$ N/A	N/A %
Cass Commercial Bank	186,075	16.00	93,044	8.00	116,305	10.00
Common Equity Tier I Capital (to risk-weighted assets)						
Cass Information Systems, Inc.	243,774	12.80	85,672	4.50	N/A	N/A
Cass Commercial Bank	172,848	14.86	52,337	4.50	75,598	6.50
Tier I capital (to risk-weighted assets)						
Cass Information Systems, Inc.	243,774	12.80	114,229	6.00	N/A	N/A
Cass Commercial Bank	172,848	14.86	69,783	6.00	93,044	8.00
Tier I capital (to average assets)						
Cass Information Systems, Inc.	243,774	9.52	102,386	4.00	N/A	N/A
Cass Commercial Bank	172,848	10.77	64,196	4.00	80,245	5.00
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

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, 2022 and 2021 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

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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:

<i>(In thousands)</i>	December 31, 2022			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
State and political subdivisions	\$ 317,376	\$ 54	\$ (22,304)	\$ 295,126
Mortgage-backed securities issued or guaranteed by U.S. government agencies or sponsored enterprises	205,175	—	(31,236)	173,939
Corporate bonds	96,348	—	(11,251)	85,097
Treasury securities	158,935	—	(3,652)	155,283
Asset backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	47,213	—	(2,190)	45,023
Total	\$ 825,047	\$ 54	\$ (70,633)	\$ 754,468

<i>(In thousands)</i>	December 31, 2021			
	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

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

<i>(In thousands)</i>	December 31, 2022					
	Less than 12 months		12 months or more		Total	
	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses	Estimated Fair Value	Unrealized Losses
State and political subdivisions	\$ 214,919	\$ 8,958	\$ 47,474	\$ 13,346	\$ 262,393	\$ 22,304
Mortgage-backed securities issued or guaranteed by U.S. government agencies or sponsored enterprises	53,732	6,135	118,017	25,101	171,749	31,236
Corporate bonds	32,517	3,629	47,580	7,622	80,097	11,251
Treasury securities	155,283	3,652	—	—	155,283	3,652
Asset backed securities issued or guaranteed by U.S. Government agencies or sponsored enterprises	—	—	47,213	2,190	47,213	2,190
Total	\$ 456,451	\$ 22,374	\$ 260,284	\$ 48,259	\$ 716,735	\$ 70,633

<i>(In thousands)</i>	December 31, 2021					
	Less than 12 months		12 months or more		Total	
	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 311 securities, or 91.7%, in an unrealized loss position as of December 31, 2022 compared to 101 securities, or 28.0%, in an unrealized loss position as of December 31, 2021. Of these securities, 101, or 29.8%, were in an unrealized loss position for greater than 12 months at December 31, 2022. The Company does not intend to sell, or believe it is likely to sell, its available for sale securities in an unrealized loss position before the anticipated recovery of current unrealized losses. As such, the Company did not recognize any credit losses on any available for sale debt securities in 2022 or 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.

<i>(In thousands)</i>	December 31, 2022	
	Amortized Cost	Fair Value
Due in 1 year or less	\$ 65,686	\$ 65,221
Due after 1 year through 5 years	267,163	261,764
Due after 5 years through 10 years	232,235	205,277
Due after 10 years	259,963	222,206
Total	\$ 825,047	\$ 754,468

The premium related to the purchase of state and political subdivisions was \$5.8 million and \$6.4 million at December 31, 2022 and 2021, respectively.

There were no securities pledged to secure public deposits or for other purposes at December 31, 2022.

Proceeds from sales of investment securities classified as available-for-sale were \$3.8 million in 2022, \$63.8 million in 2021, and \$21.9 million in 2020. Gross realized gains on the sales in 2022, 2021, and 2020 were \$15,000, \$55,000, and \$1.1 million, respectively. Gross realized losses on the sales in 2022, 2021, and 2020 were \$0, \$4,000 and \$0, respectively.

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, 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.

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A summary of loan categories is as follows:

<i>(In thousands)</i>	December 31,	
	2022	2021
Commercial and industrial	\$ 561,616	\$ 450,336
Real estate:		
Commercial:		
Mortgage	108,166	108,759
Construction	17,874	24,797
Faith-based:		
Mortgage	387,114	355,582
Construction	8,094	14,664
PPP	—	6,299
Other	42	130
Total loans	\$ 1,082,906	\$ 960,567

The following table presents the aging of loans by loan categories at December 31, 2022:

<i>(In thousands)</i>	Performing			Nonperforming		Total Loans
	Current	30-59 Days	60-89 Days	90 Days and Over	Non-accrual	
Commercial and industrial	\$ 560,466	\$ —	\$ —	\$ —	\$ 1,150	\$ 561,616
Real estate						
Commercial:						
Mortgage	108,166	—	—	—	—	108,166
Construction	17,874	—	—	—	—	17,874
Faith-based:						
Mortgage	387,114	—	—	—	—	387,114
Construction	8,094	—	—	—	—	8,094
PPP	—	—	—	—	—	—
Other	42	—	—	—	—	42
Total	\$ 1,081,756	\$ —	\$ —	\$ —	\$ 1,150	\$ 1,082,906

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

<i>(In thousands)</i>	Performing			Nonperforming		Total Loans
	Current	30-59 Days	60-89 Days	90 Days and Over	Non- accrual	
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 credit exposure of the loan portfolio by internally assigned credit grade as of December 31, 2022:

<i>(In thousands)</i>	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	\$ 549,241	\$ 11,225	\$ 1,150	\$ 561,616
Real estate				
Commercial:				
Mortgage	108,166	—	—	108,166
Construction	17,874	—	—	17,874
Faith-based:				
Mortgage	386,169	945	—	387,114
Construction	8,094	—	—	8,094
PPP	—	—	—	—
Other	42	—	—	42
Total	\$ 1,069,586	\$ 12,170	\$ 1,150	\$ 1,082,906

- (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 higher level of management attention.

The Company had one loan that was considered an individually evaluated credit at December 31, 2022, with no specific allowance. This loan was paid off in full in January 2023.

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

<i>(In thousands)</i>	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 higher level of management attention.

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

There were no loan modifications considered as troubled debt restructurings during the year ended December 31, 2022 and 2021.

A summary of the ACL by category for the period ended December 31, 2022 is as follows:

<i>(In thousands)</i>	C&I	CRE	Faith-based CRE	Construction	Total
Allowance for credit losses on loans:					
Balance at December 31, 2021	\$ 5,034	\$ 1,031	\$ 5,684	\$ 292	\$ 12,041
Provision for (release of) credit losses ⁽¹⁾	931	(91)	753	(108)	1,485
Recoveries	13	—	—	—	13
Balance at December 31, 2022	\$ 5,978	\$ 940	\$ 6,437	\$ 184	\$ 13,539

(1) For the period ended December 31, 2022, there was a release of credit losses of \$135,000 for unfunded commitments.

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

<i>(In thousands)</i>	C&I	CRE	Faith-based CRE	Construction	Total
Allowance for credit losses on loans:					
Balance at January 1, 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.

As of December 31, 2022 and 2021, there were no loans to executive officers or directors, or their affiliates.

Note 5 Premises and Equipment

A summary of premises and equipment is as follows:

<i>(In thousands)</i>	December 31,	
	2022	2021
Land	\$ 873	\$ 873
Buildings	14,903	14,834
Leasehold improvements	2,044	2,036
Furniture, fixtures and equipment	14,668	13,551
Purchased software	4,648	4,640
Internally developed software	27,308	22,665
Total	64,444	58,599
Less accumulated depreciation	44,486	40,486
Total premises and equipment, net	\$ 19,958	\$ 18,113

Total depreciation charged to expense in 2022, 2021 and 2020 amounted to \$4.0 million, \$4.3 million, and \$4.5 million, 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.

In June 2022, the Company acquired the assets of mobile church management software developer TouchPoint, a division of the Pursuant Group, Inc., and recorded intangible assets of \$5.3 million. Those intangible assets were valued at \$3.0 million for goodwill, \$1.7 million for the customer list, \$368,000 for software, and \$183,000 for the trade name. The goodwill is deductible for tax purposes over 15 years, starting in 2022. The intangible assets and financial results of TouchPoint are included in the Information Services operating segment.

The purchase price of the acquisition consisted of cash considerations of \$4.9 million and potential contingent consideration in the form of an earn out up to \$2.5 million. The Company valued the contingent earn out component at \$389,000. The fair value of the contingent consideration was estimated on the acquisition date as the present value of the expected future contingent payments which were determined using a Monte Carlo simulation. The contingent consideration is based upon 4 years of earnings before interest, taxes, depreciation and amortization (EBITDA) subsequent to the acquisition date. The Company and Pursuant Group, Inc. agreed to settle the contingent consideration at the determined fair

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value of \$389,000 during the fourth quarter of 2022. As such, there is no contingent consideration related to TouchPoint going forward.

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

<i>(In thousands)</i>	December 31, 2022		December 31, 2021	
	Gross Carrying Amount	Accumulated Amortization	Gross Carrying Amount	Accumulated Amortization
Assets eligible for amortization:				
Customer lists	\$ 6,470	\$ (4,561)	\$ 4,778	\$ (4,341)
Patent	72	(32)	72	(28)
Software	3,212	(1,508)	2,844	(1,104)
Trade Name	373	(42)	190	(22)
Other	500	(358)	500	(325)
Unamortized intangible assets:				
Goodwill	17,309	—	14,262	—
Total intangible assets	\$ 27,936	\$ (6,501)	\$ 22,646	\$ (5,820)

Customer lists are amortized over 7 to 10 years; patents over 18 years, software over 3 years to 7 years, trade name over 10 years to 20 years and other intangible assets over 15 years. Amortization of intangible assets amounted to \$680,000 and \$859,000 for the years ended December 31, 2022, and 2021, respectively. Estimated future amortization of intangibles is \$780,000 in 2023, \$738,000 in 2024, \$730,000 in 2025, \$582,000 in 2026, and \$262,000 in 2027.

Note 7

Interest-Bearing Deposits

Interest-bearing deposits consist of the following:

<i>(In thousands)</i>	December 31,	
	2022	2021
Interest-bearing demand deposits	\$ 567,426	\$ 573,567
Savings deposits	6,413	18,110
Time deposits:		
Less than \$100	2,526	3,536
\$100 to less than \$250	20,137	30,648
\$250 or more ⁽¹⁾	17,958	13,000
Total	\$ 614,460	\$ 638,861
Weighted average interest rate	1.74 %	0.15 %

- (1) The scheduled maturities of time deposits not covered by deposit insurance consist of \$17.7 million within one year and \$264,000 within one to three years.

Interest expense consists of the following:

<i>(In thousands)</i>	December 31,		
	2022	2021	2020
Interest-bearing demand deposits	\$ 3,118	\$ 582	\$ 1,313
Savings deposits	38	9	24
Time deposits:			
Less than \$100	145	332	550
\$100 to less than \$250	79	109	206
\$250 or more	102	139	267
Total	\$ 3,482	\$ 1,171	\$ 2,360

The scheduled maturities of time deposits are summarized as follows:

<i>(In thousands)</i>	December 31,			
	2022		2021	
	Amount	Percent of Total	Amount	Percent of Total
Due within:				
One year	\$ 37,925	93.4 %	\$ 30,855	65.4 %
Two years	1,773	4.4 %	15,061	31.9 %
Three years	797	2.0 %	1,205	2.6 %
Four years	88	0.2 %	48	0.1 %
Five years	38	0.1 %	15	— %
Total	\$ 40,621	100.0 %	\$ 47,184	100.0 %

Note 8
Unused Available Lines of Credit

As of December 31, 2022, the Bank had unsecured lines of credit at six correspondent banks to purchase federal funds up to a maximum of \$83.0 million in aggregate. As of December 31, 2022, the Bank had secured lines of credit with the Federal Home Loan Bank of \$237.8 million collateralized by commercial mortgage loans. At December 31, 2022, the Company had lines of credit from three banks up to a maximum of \$200.0 million in aggregate collateralized by state and political subdivision securities. There were no amounts outstanding at December 31, 2022, and 2021 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 2022.

	2022
Shares outstanding at January 1	13,734,295
Issuance of common stock:	
Employee restricted stock grants	18,160
Employee restricted stock units vested	2,002
Performance-based stock vested	11,029
Employee SARs exercised	12,668
Directors' stock grants	22,699
Shares repurchased	(130,374)
Shares forfeited	(823)
Shares outstanding at December 31	13,669,656

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:

<i>(In thousands except share and per share data)</i>	December 31,		
	2022	2021	2020
Basic:			
Net income	\$ 34,904	\$ 28,604	\$ 25,176
Weighted average common shares outstanding	13,552,503	14,091,773	14,364,406
Basic earnings per share	\$ 2.58	\$ 2.03	\$ 1.75
Diluted:			
Net income	\$ 34,904	\$ 28,604	\$ 25,176
Weighted average common shares outstanding	13,552,503	14,091,773	14,364,406
Effect of dilutive restricted stock, performance based restricted stock ("PBRS"), and SARs	255,526	238,103	202,541
Weighted average common shares outstanding assuming dilution	13,808,029	14,329,876	14,566,947
Diluted earnings per share	\$ 2.53	\$ 2.00	\$ 1.73

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.

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:

<i>(In thousands)</i>	2022	2021
Projected benefit obligation:		
Balance, January 1	\$ 117,323	\$ 122,035
Service cost	—	1,002
Interest cost	3,293	3,076
Actuarial gain	(31,982)	(5,822)
Benefits paid	(3,201)	(2,968)
Balance, December 31	\$ 85,433	\$ 117,323
Plan assets:		
Fair value, January 1	\$ 114,136	\$ 106,667
Actual investment return	(26,820)	10,107
Employer contribution	—	330
Expenses paid from plan assets	(721)	—
Benefits paid	(3,201)	(2,968)
Fair value, December 31	\$ 83,394	\$ 114,136
Funded status:		
Accrued pension liability	\$ (2,039)	(3,187)

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

	2022	2021	2020
Weighted average discount rate	5.25 %	2.85 %	2.55 %
Rate of increase in compensation levels	N/A	(a)	(a)

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

The accumulated benefit obligation was \$85.4 million and \$117.3 million as of December 31, 2022 and 2021, respectively. The Company made no contribution of during 2022, while in 2021 there was a contribution of \$330,000 made to the Plan.

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The Company has not determined if it will make a contribution to the Plan in 2023. The following pension benefit payments, as appropriate, are expected to be paid by the Plan:

	Amount
2023	\$ 4,193,000
2024	4,436,000
2025	4,636,000
2026	4,844,000
2027	5,048,000
2026-2030	27,845,000

The Plan's (benefit) pension cost included the following components:

<i>(In thousands)</i>	For the Year Ended December 31,		
	2022	2021	2020
Service cost – benefits earned during the year	\$ —	\$ 1,002	\$ 4,329
Interest cost on projected benefit obligations	3,293	3,076	3,908
Expected return on plan assets	(5,857)	(6,310)	(6,049)
Net amortization and deferral	—	393	1,946
Net periodic (benefit) pension cost	\$ (2,564)	\$ (1,839)	\$ 4,134

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

	2022	2021	2020
Weighted average discount rate	2.85 %	2.55 %	3.30 %
Rate of increase in compensation levels	N/A	(a)	(a)
Expected long-term rate of return on assets	6.00 %	6.00 %	6.50 %

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

For 2022, the Pri-2012 Mortality Table and the MP-2021 Mortality Improvement Table were used. 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.

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 68.5% fixed income, 14.0% U.S. equity, 14.0% non-U.S. equity, and real estate 3.5%. 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	68.5 %	5.46 %	10.49 %
Large Cap U.S. Equities	14.0 %	7.98 %	17.66 %
International (Developed)	10.0 %	9.07 %	18.52 %
International (Emerging)	4.0 %	11.91 %	26.71 %
Real Estate	3.5 %	7.19 %	15.13 %

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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,						
2022				2021		
<i>(In thousands)</i>	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	\$ 566	\$ 566	\$ —	\$ 535	\$ 535	\$ —
Real estate investment trusts	7,120	—	7,120	6,250	—	6,250
Equity securities						
U.S. Small/Mid Cap Growth	2,055	—	2,055	4,734	—	4,734
Non-U. S. Core	7,822	—	7,822	19,164	—	19,164
U.S. Large Cap Passive	8,319	—	8,319	18,279	—	18,279
Emerging Markets	3,000	—	3,000	7,701	—	7,701
Fixed Income						
U.S. Core	51,756	—	51,756	51,386	—	51,386
U.S. Passive	—	—	—	—	—	—
Opportunistic	2,756	—	2,756	6,087	—	6,087
Total	\$ 83,394	\$ 566	\$ 82,828	\$ 114,136	\$ 535	\$ 113,601

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:

<i>(In thousands)</i>	December 31,	
	2022	2021
Benefit obligation:		
Balance, January 1	\$ 12,420	\$ 13,412
Service cost	—	147
Interest cost	318	291
Benefits paid	(348)	(282)
Actuarial gain	(2,811)	(1,148)
Balance, December 31	\$ 9,579	\$ 12,420

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The following represent the major assumptions used to determine the projected benefit obligation of the SERP. For 2022, 2021 and 2020, the SERP's expected benefit cash flows were discounted using the FTSE Above Median Double-A Curve.

	2022	2021	2020
Weighted average discount rate	5.15 %	2.65 %	2.20 %
Rate of increase in compensation levels	N/A	(a)	(a)

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

The accumulated benefit obligation was \$9.6 million and \$12.4 million as of December 31, 2022 and 2021, respectively. Since this is an unfunded plan, there are no plan assets. Benefits paid were \$348,000 in 2022, \$282,000 in 2021, and \$291,000 in 2020. Expected future benefits payable by the Company over the next ten years are as follows:

	Amount
2023	\$ 810,000
2024	791,000
2025	788,000
2026	785,000
2027	780,000
2026-2030	\$ 3,787,000

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

<i>(In thousands)</i>	For the Year Ended December 31,		
	2022	2021	2020
Service cost – benefits earned during the year	\$ —	\$ 147	\$ 121
Interest cost on projected benefit obligations	318	291	347
Net amortization and deferral	108	203	112
Net periodic pension cost	\$ 426	\$ 641	\$ 580

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

<i>(In thousands)</i>	The Plan		SERP	
	2022	2021	2022	2021
Prior service cost	\$ —	\$ —	\$ —	\$ —
Net actuarial loss (gain)	6,833	5,417	(136)	2,783
Total	\$ 6,833	\$ 5,417	\$ (136)	\$ 2,783

The estimated pretax prior service cost and net actuarial loss (gain) in accumulated other comprehensive loss at December 31, 2022 expected to be recognized as components of net periodic benefit cost in 2023 for the Plan are each \$0. The estimated pretax prior service cost and net actuarial loss in accumulated other comprehensive loss at December 31, 2022 expected to be recognized as components of net periodic benefit cost in 2023 for the SERP are each \$0.

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 2022, 2021, and 2020 was \$7.9 million, \$6.4 million, and \$5.7 million, 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 2022, 2021 and 2020 were \$4.6 million, \$3.5 million, and \$1.5 million, 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 1.5 million 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, 2022 were as follows:

	Shares	Weighted Average Grant Date Fair Value
Balance at December 31, 2021	165,553	\$ 44.81
Granted	64,151	\$ 39.30
Vested	(23,316)	\$ 48.85
Forfeited	(823)	\$ 43.89
Balance at December 31, 2022	205,565	\$ 42.64

During 2021 and 2020, 53,906 and 38,226 shares, respectively, were granted with weighted average per share market values at date of grant of \$41.55 in 2021 and \$47.07 in 2020. The fair value of such shares are based on the market price on the date of grant. Amortization of restricted stock bonus awards totaled \$2.4 million for 2022, \$1.8 million for 2021 and \$1.5 million for 2020. As of December 31, 2022, the total unrecognized compensation expense related to non-vested restricted stock awards was \$1.4 million, and the related weighted average period over which it is expected to be recognized is approximately 0.60 years. The total fair value of shares vested during the years ended December 2022, 2021, and 2020 was \$1.1 million, \$1.2 million, and \$1.0 million, 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 year ended December 31, 2022:

	Shares	Weighted Average Grant Date Fair Value
Balance at December 31, 2021	116,543	\$ 46.79
Granted	57,542	39.58
Vested	(34,066)	49.05
Forfeited	(1,234)	43.89
Balance at December 31, 2022	138,785	\$ 43.19

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The PBRS that vested during the year ended December 31, 2022 achieved weighted average financial goals of 52.9% of target, resulting in the issuance of 18,021 shares of common stock. The PBRS that vested during the year ended December 31, 2021 achieved weighted average financial goals of 94.4% of target, resulting in the issuance of 31,150 shares of common stock. The outstanding PBRS at December 31, 2022 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 2022, there were no SARs granted and no expense recognized. As of December 31, 2022, there was no unrecognized compensation expense related to SARs.

Changes in SARs outstanding for the year ended December 31, 2022 were as follows:

	SARs	Weighted Average Exercise Price
Balance at December 31, 2021	117,089	\$ 34.91
Exercised	(70,764)	30.52
Balance at December 31, 2022	46,325	41.62
Exercisable at December 31, 2022	46,325	\$ 41.62

The total intrinsic value of SARs exercised during 2022 and 2021 was \$2.2 million and \$630,000, respectively. The average remaining contractual term for SARs outstanding as of December 31, 2022 was 0.73 years, and the aggregate intrinsic value was \$192,000. 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 total compensation cost for share-based payment arrangements was \$6.7 million, \$2.9 million, and \$2.3 million in 2022, 2021, and 2020, respectively.

Note 12

Other Operating Expense

Details of other operating expense are as follows:

(In thousands)	For the Years Ended December 31,		
	2022	2021	2020
Promotional expense	\$ 2,889	\$ 2,627	\$ 2,184
Outside service fees	7,874	7,413	5,845
Data processing services	3,365	2,650	1,900
Other	7,950	4,053	5,458
Total other operating expense	\$ 22,078	\$ 16,743	\$ 15,387

Note 13
Income Taxes

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

	For the Years Ended December 31,		
<i>(In thousands)</i>	2022	2021	2020
Current:			
Federal	\$ 7,794	\$ 5,018	\$ 5,350
State	1,365	897	671
Deferred:			
Federal	(990)	(608)	(636)
State	(173)	(90)	(220)
Total income tax expense	\$ 7,996	\$ 5,217	\$ 5,165

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,		
<i>(In thousands)</i>	2022	2021	2020
Expected income tax expense	\$ 9,035	\$ 7,103	\$ 6,385
(Reductions) increases resulting from:			
Tax-exempt income	(1,571)	(1,673)	(1,588)
State taxes, net of federal benefit	942	638	356
Share-based compensation adjustment	258	92	70
Federal tax credits	(473)	(357)	(336)
Other, net	(195)	(586)	278
Total income tax expense	\$ 7,996	\$ 5,217	\$ 5,165

Income tax expense in 2022 totaled \$8.0 million compared to \$5.2 million in 2021 and 2020. When measured as a percent of pre-tax income, the Company's effective tax rate was 18.6% in 2022, 15.4% in 2021, and 17.0% in 2020.

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

<i>(In thousands)</i>	December 31,	
	2022	2021
Deferred tax assets:		
Allowance for credit losses	\$ 3,222	\$ 2,866
ASC 715 pension funding liability	1,594	1,952
Supplemental executive retirement plan accrual	2,311	2,293
Stock compensation	2,745	1,875
Unrealized loss on investment securities available-for-sale ⁽¹⁾	16,798	—
Research and development expenses	772	—
Lease liability	2,261	1,145
Other	640	633
Total deferred tax assets	\$ 30,343	\$ 10,764
Deferred tax liabilities:		
Premises and equipment	\$ (1,710)	\$ (2,235)
Pension	(1,141)	(531)
Intangible assets	(1,744)	(1,493)
Unrealized gain on investment securities available-for-sale	—	(2,185)
Right of use asset	(2,178)	(1,032)
Prepaid expenses	(847)	(479)
Other	(144)	(18)
Total deferred tax liabilities	\$ (7,764)	\$ (7,973)
Net deferred tax assets	\$ 22,579	\$ 2,791

- (1) The deferred tax asset associated with the unrealized losses on securities is mainly a result of changes in interest rates, and the unrealized losses are considered to be temporary as the fair value is expected to recover as the securities approach their respective maturity dates. The issuers of the securities are of high credit quality and all principal amounts are expected to be paid when the securities mature. The Company does not intend to sell and it is likely that the Company will not be required to sell the securities prior to their anticipated recovery.

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, 2022 or 2021, 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:

<i>(In thousands)</i>	2022	2021	2020
Balance at January 1	\$ 1,405	\$ 1,231	\$ 1,299
Changes in unrecognized tax benefits as a result of tax positions taken during a prior year	(176)	165	62
Changes in unrecognized tax benefits as a result of tax position taken during the current year	222	239	233
Reductions to unrecognized tax benefits as a result of a lapse of the applicable statute of limitations	(199)	(230)	(315)
Decreases in unrecognized tax benefits as a result of settlements with taxing authorities	—	—	(48)
Balance at December 31	\$ 1,252	\$ 1,405	\$ 1,231

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At December 31, 2022, 2021 and 2020, the balances of the Company's unrecognized tax benefits which would, if recognized, affect the Company's effective tax rate were \$1,129,000, \$1,134,000 and \$1,096,000, respectively. These amounts are net of the offsetting benefits from other taxing jurisdictions.

As of December 31, 2022, 2021 and 2020, the Company had \$84,000, \$85,000 and \$114,000, 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 \$254,000 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 2019, 2020 and 2021 remain subject to examination by the Internal Revenue Service. In addition, the Company is subject to state tax examinations for the tax years 2018 through 2021.

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:

	2022		2021	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
<i>(In thousands)</i>				
Balance sheet assets:				
Cash and cash equivalents	\$ 200,942	\$ 200,942	\$ 514,928	\$ 514,928
Investment securities	754,468	754,468	673,453	673,453
Loans, net	1,069,367	1,004,682	948,526	948,701
Accrued interest receivable	8,297	8,297	6,799	6,799
Total	\$ 2,033,074	\$ 1,968,389	\$ 2,143,706	\$ 2,143,881
Balance sheet liabilities:				
Deposits	\$ 1,257,217	\$ 1,257,217	\$ 1,221,503	\$ 1,221,503
Accounts and drafts payable	1,067,600	1,067,600	1,050,396	1,050,396
Accrued interest payable	66	66	16	16
Total	\$ 2,324,883	\$ 2,324,883	\$ 2,271,915	\$ 2,271,915

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, 2022, an allowance for unfunded commitments of \$232,000 had been recorded, as compared to \$367,000 at December 31, 2021. See Note 1 "Summary of Significant Accounting Policies" for information related to CECL.

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:

<i>(In thousands)</i>	December 31,	
	2022	2021
Commitments to extend credit	\$ 237,006	\$ 208,395
Standby letters of credit	14,494	12,859
Commercial letters of credit	354	771

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.

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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.

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.

Financial 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, 2022, 2021 and 2020.

<i>(In thousands)</i>	For the Years Ended December 31,		
	2022	2021	2020
Fee revenue and other income			
<i>In-scope of ASC 606</i>			
Processing fees	\$ 76,470	\$ 74,589	\$ 74,638
Financial fees	43,757	32,733	23,107
Information services payment and processing revenue	120,227	107,322	97,745
Bank service fees	1,430	1,369	1,158
Fee revenue <i>(in-scope of ASC 606)</i>	121,657	108,691	98,903
Other income <i>(out-of-scope of ASC 606)</i>	3,325	1,000	1,538
Total fee revenue and other income	\$ 124,982	\$ 109,691	\$ 100,441

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. In addition, this segment provides church management software and on-line generosity services primarily for faith-based ministries. The Banking Services segment provides banking services primarily to privately held businesses, franchise restaurants and faith-based ministries, 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. Banking Services interest income is determined by actual interest income on loans minus actual interest expense paid on deposits plus/minus an allocation for interest income or expense dependent on the remaining available liquidity of the segment. Information Services interest income is determined by multiplying available liquidity by actual yields on short-term investments and investment securities.

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

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Summarized information about the Company's operations in each industry segment for the years ended December 31, 2022, 2021 and 2020 is as follows:

<i>(In thousands)</i>	Information Services	Banking Services	Corporate, Eliminations and Other	Total
2022				
Fee income	\$ 120,234	\$ 3,606	\$ 1,142	\$ 124,982
Interest income*	28,528	40,913	(5,426)	64,015
Interest expense	166	4,143	(827)	3,482
Intersegment income (expense)	(3,350)	3,350	—	—
Tax-equivalized pre-tax income*	26,478	21,566	(3,455)	44,589
Goodwill	17,173	136	—	17,309
Other intangible assets, net	4,126	—	—	4,126
Total assets	1,595,939	1,182,439	(205,355)	2,573,023
Average funding sources	1,379,355	953,346	—	2,332,701
2021				
Fee income	\$ 106,678	\$ 1,405	\$ 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*	25,446	11,004	(756)	35,694
Goodwill	14,126	136	—	14,262
Other intangible assets, net	2,564	—	—	2,564
Total assets	1,450,594	1,090,626	13,681	2,554,901
Average funding sources	1,150,493	876,018	—	2,026,511
2020				
Fee income	\$ 97,640	\$ 1,515	\$ 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*	16,230	14,973	1,027	32,230
Goodwill	14,126	136	—	14,262
Other intangible assets, net	3,423	—	—	3,423
Total assets	1,188,745	997,483	17,007	2,203,235
Average funding sources	902,486	737,962	—	1,640,448

* Presented on a tax-equivalent basis assuming a tax rate of 21%. The tax-equivalent adjustment was approximately \$1.7 million for 2022, \$1.9 million for 2021, and \$1.9 million for 2020.

Note 18
Leases

The Company leases certain premises under operating leases. As of December 31, 2022, the Company had lease liabilities of \$9.5 million and right-of-use assets of \$9.2 million. 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 2022 was operating lease cost of \$1.5 million, short-term lease cost of \$203,000, and there was no variable lease cost. The Company paid cash of \$1.6 million for operating lease amounts included in the measurement of lease liabilities for the year ended December 31, 2022. No right-of-use assets were obtained in exchange for lease liabilities during the year ended December 31, 2022.

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For the year ended December 31, 2022, the weighted average remaining lease term for the operating leases was 8.2 years and the weighted average discount rate used in the measurement of operating lease liabilities was 3.6%. 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. The increase in the Company's expected future minimum lease payments since December 31, 2021 was a result of renewing the lease on the Company's corporate headquarters for 10 years, effective September 2022.

A maturity analysis of operating lease liabilities and undiscounted cash flows as of December 31, 2022 was as follows:

<i>(In thousands)</i>	December 31, 2022
Lease payments due	
Less than 1 year	\$ 1,348
1-2 years	1,327
2-3 years	1,345
3-4 years	1,351
4-5 years	1,357
Over 5 years	4,219
Total undiscounted cash flows	10,947
Discount on cash flows	1,448
Total lease liability	\$ 9,499

There were no sale and leaseback transactions, leveraged leases, or lease transactions with related parties during the year ended December 31, 2022. At December 31, 2022, 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, 2022, 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.

<i>(In thousands)</i>	Condensed Balance Sheets December 31,	
	2022	2021
Assets		
Cash and due from banks	\$ 5,081	\$ 132,050
Short-term investments	26,834	585
Securities available-for-sale, at fair value	490,829	566,835
Loans, net	74,810	40,515
Payments in advance of funding	293,775	291,427
Investments in subsidiaries	164,907	164,650
Premises and equipment, net	19,525	17,443
Accounts and drafts receivable from customers	95,779	4,992
Other assets	119,627	90,948
Total assets	<u>\$ 1,291,167</u>	<u>\$ 1,309,445</u>
Liabilities and Shareholders' Equity		
Liabilities:		
Accounts and drafts payable	\$ 1,057,463	\$ 1,041,070
Other liabilities	27,379	22,577
Total liabilities	1,084,842	1,063,647
Total shareholders' equity	206,325	245,798
Total liabilities and shareholders' equity	<u>\$ 1,291,167</u>	<u>\$ 1,309,445</u>

<i>(In thousands)</i>	Condensed Statements of Income For the Years Ended December 31,		
	2022	2021	2020
Income from subsidiaries – management fees	\$ 4,315	\$ 3,115	\$ 2,854
Processing fees	74,382	72,579	72,513
Financial fees	42,243	31,847	22,565
Other fees	2,606	970	1,533
Net interest income after provision for (release of) credit losses	13,435	11,316	10,932
Total revenue	136,981	119,827	110,397
Expenses:			
Salaries and employee benefits	94,047	80,434	77,577
Other expenses	32,406	27,406	25,347
Total expenses	126,453	107,840	102,924
Income before income tax and equity in undistributed income of subsidiaries	10,528	11,987	7,473
Income tax expense	1,242	635	340
Income before undistributed income of subsidiaries	9,286	11,352	7,133
Equity in undistributed income of subsidiaries	25,618	17,252	18,043
Net income	<u>\$ 34,904</u>	<u>\$ 28,604</u>	<u>\$ 25,176</u>

	Condensed Statements of Cash Flows For the Years Ended December 31,		
(In thousands)	2022	2021	2020
Cash flows from operating activities:			
Net income	\$ 34,904	\$ 28,604	\$ 25,176
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Equity in undistributed income of subsidiaries	(25,618)	(17,252)	(18,043)
Net change in other assets	(4,640)	(212)	6,054
Net change in other liabilities	6,462	(9,307)	(6,525)
Stock-based compensation expense	6,732	2,859	2,267
Other, net	25,412	20,921	18,236
Net cash provided by operating activities	43,252	25,613	27,165
Cash flows from investing activities:			
Net decrease (increase) in securities	3,064	(226,090)	65,689
Net (increase) decrease in loans	(34,295)	8,799	(2,545)
Net (increase) decrease in payments in advance of funding	(2,347)	(96,864)	11,595
Purchase of bank-owned life insurance	(4,000)	(25,119)	—
Purchases of premises and equipment, net	(5,851)	(2,233)	(1,810)
Asset acquisition of TouchPoint	(4,814)	—	—
Net cash (used in) provided by investing activities	(48,243)	(341,507)	72,929
Cash flows from financing activities:			
Net (increase) decrease in accounts and drafts receivable from customers	(90,787)	6	59,404
Net increase in accounts and drafts payable	16,393	208,650	148,935
Short-term borrowings	—	—	(18,000)
Cash dividends paid	(15,442)	(15,446)	(15,599)
Purchase of common shares for treasury	(5,299)	(30,997)	(6,825)
Other financing activities, net	(594)	(850)	(1,098)
Net cash (used in) provided by financing activities	(95,729)	161,363	166,817
Net (decrease) increase in cash and cash equivalents	(100,720)	(154,531)	266,911
Cash and cash equivalents at beginning of year	132,635	287,166	20,255
Cash and cash equivalents at end of year	\$ 31,915	\$ 132,635	\$ 287,166

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, 2022 and 2021, 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, 2022, 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, 2022 and 2021, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2022, 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, 2022, 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, 2023 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

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, 2022 was \$13.5 million, of which \$13.5 million was related to the allowance for credit losses on loans evaluated on a collective basis (the "collective ACL"). The December 31, 2022 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, 2023

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, 2022. 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, 2022.

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, 2022.

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, 2022 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, 2022, 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, 2022, 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, 2022, 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, 2022 and 2021, 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, 2022, and the related notes (collectively, the consolidated financial statements), and our report dated February 28, 2023 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, 2023

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 2023 Annual Meeting of Shareholders (the “2023 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 2022.

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 2023 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 2023 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, 2022:

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⁾	390,675	\$ 42.77	130,712
Equity compensation plans not approved by security holders	—	—	—
Total	390,675	\$ 42.77	130,712

(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 2023 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 5” of the Company’s 2023 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, 2022*](#)

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, 2023 By /s/ Eric H. Brunngraber
Eric H. Brunngraber
Chairman and Chief Executive Officer
(Principal Executive Officer)

Date: February 28, 2023 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, 2023 By /s/ Eric H. Brunngraber
Eric H. Brunngraber

Date: February 28, 2023 By /s/ Ralph W. Clermont
Ralph W. Clermont

Date: February 28, 2023 By /s/ Robert A. Ebel
Robert A. Ebel

Date: February 28, 2023 By /s/ Benjamin F. Edwards, IV
Benjamin F. Edwards, IV

Date: February 28, 2023 By /s/ Wendy J. Henry
Wendy J. Henry

Date: February 28, 2023 By /s/ James J. Lindemann
James J. Lindemann

Date: February 28, 2023 By /s/ Ann W. Marr
Ann W. Marr

Date: February 28, 2023 By /s/ Sally H. Roth
Sally H. Roth

Date: February 28, 2023 By /s/ Joseph D. Rupp
Joseph D. Rupp

Date: February 28, 2023 By /s/ Randall L. Schilling
Randall L. Schilling

Date: February 28, 2023 By /s/ Franklin D. Wicks, Jr.
Franklin D. Wicks, Jr.

CASS INFORMATION SYSTEMS, INC
Summary Profit Sharing Program

The purpose of the profit sharing program is to facilitate the Company's continued growth and success by providing rewards that are commensurate with achievement, thereby creating an incentive for superior performance and improved results for shareholders. All employees of Cass Information Systems are eligible to participate in the program, unless specifically excluded due to their employment category, such as temporary staff or if their performance is not meeting the minimum expectations.

The amount of the profit sharing fund available for distribution is set by the Board of Directors and currently set at 22.5% of the company's net income after taxes for the period of distribution.

Distributions are not guaranteed and the company may distribute profit sharing benefits on any schedule and in any manner that it deems appropriate. Currently, distributions are made on a semi-annual basis.

Allocations to employee groups eligible to participate are divided into exempt and non-exempt pools based on the salaries of each group over the corresponding period. The non-exempt pool is distributed to each eligible employee based on a factor of salary and performance score. The exempt pool is distributed to all exempt employees considering factors such as position, salary grade and individual performance. Specific allocations are made out of the exempt pool to the Chief Executive Officer (CEO) and other executive officers, including named executive officers (NEOs) as follows:

CEO – The CEO receives a percentage of the total profit sharing pool based on the change in net income after taxes (NIAT) from the prior year and is set to provide a target percentage of base salary at target performance of 45%. The amount paid to the CEO can range from 0% up to a maximum of 70% of base pay.

Executive Officers – A percentage of the total profit sharing pool is provided for distribution to other executive officers based on the change in NIAT from the prior year and is set to provide a target percentage of base salaries at target performance of 40%. The total funds provided for distribution to the executive officers can range from 0% up to a maximum of 60% of base pay. The amount of funds in this pool is distributed to each individual executive officer by the CEO based on a subjective evaluation considering internal equity and other individual factors related to performance. Individual distributions to exempt employees, other than the CEO and executive officers, as a percent of salary are subject to set limits based on each individual's pay grade and any payment in excess of these percentages shall require the review and approval of the President or Chief Operating Officer of each business unit and the CEO. Payments in excess of the set limits for the CEO and executive officers need approval from the Board of Director's Compensation Committee.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the registration statements (No. 333-44497, 333-44499, 033-91456, 033-91568, 333-143411, 333-181772, and 333-188504) on Form S-8 of our reports dated February 28, 2023, with respect to the consolidated financial statements of Cass Information Systems, Inc. and the effectiveness of internal control over financial reporting.

/s/ KPMG LLP

St. Louis, Missouri
February 28, 2023

CERTIFICATIONS

I, Eric H. Brunngraber, certify that:

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

Date: February 28, 2023

/s/ Eric H. Brunngraber

Eric H. Brunngraber
Chairman and Chief Executive Officer
(Principal Executive Officer)

CERTIFICATIONS

I, Michael J. Normile, certify that:

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

Date: February 28, 2023

/s/ Michael J. Normile

Michael J. Normile
Executive Vice President and Chief Financial Officer
(Principal Financial and Accounting Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Cass Information Systems, Inc. (“the Company”) on Form 10-K for the period ended December 31, 2022, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Eric H. Brunngraber, Chairman, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Eric H. Brunngraber

Eric H. Brunngraber
Chairman and Chief Executive Officer
(Principal Executive Officer)
February 28, 2023

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

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of Cass Information Systems, Inc. (“the Company”) on Form 10-K for the period ended December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Michael J. Normile, Executive Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Michael J. Normile

Michael J. Normile

Executive Vice President and Chief Financial Officer

(Principal Financial and Accounting Officer)

February 28, 2023

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