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

FORM 10-K

☒ ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2023
OR
☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from ______ to ______.
Commission file number 000-51404

FEDERAL HOME LOAN BANK OF INDIANAPOLIS

(Exact name of registrant as specified in its charter)

Federally Chartered Corporation	**35-6001443**
(State or other jurisdiction of incorporation)	(IRS employer identification number)
8250 Woodfield Crossing Blvd. Indianapolis, IN	**46240**
(Address of principal executive offices)	(Zip code)

Registrant's telephone number, including area code: (317) 465-0200

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
None	None	None

Securities registered pursuant to Section 12(g) of the Act:
Class B capital stock, par value $100 per share
(Title of class)

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) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). ☒ Yes ☐ No

Indicate by check mark 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 the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

☐ Large accelerated filer	☐ Accelerated filer	☐ Emerging growth company
☒ Non-accelerated filer	☐ Smaller reporting 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 on 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. ☒ Yes ☐ No

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 Act). ☐ Yes ☒ No

Registrant's stock is not publicly traded and is only issued to members of the registrant. Such stock is issued and redeemed at par value, $100 per share, subject to certain regulatory and statutory limits. At June 30, 2023, the aggregate par value of the Class B stock held by members and former members of the registrant was approximately $2.8 billion. At February 29, 2024, including mandatorily redeemable capital stock, we had zero outstanding shares of Class A stock and 26,908,316 outstanding shares of Class B stock.

DOCUMENTS INCORPORATED BY REFERENCE: None.

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DEFINED TERMS

advance: Secured loan to member, former member or Housing Associate
AFS: Available-for-Sale
Agency: GSE and Ginnie Mae
AHP: Affordable Housing Program
AMA: Acquired Member Assets
AOCI: Accumulated Other Comprehensive Income (Loss)
Bank Act: Federal Home Loan Bank Act of 1932, as amended
bps: basis points
CDFI: Community Development Financial Institution
CFI: Community Financial Institution, a Federal Deposit Insurance Corporation-insured depository institution with average total assets below an annually- adjusted limit established by the Finance Agency Director based on the Consumer Price Index
CFPB: Bureau of Consumer Financial Protection
Clearinghouse: A United States Commodity Futures Trading Commission-registered derivatives clearing organization
CO bond: Consolidated Obligation bond
DB Plan: Pentegra Defined Benefit Pension Plan for Financial Institutions, as amended
DC Plan: Federal Home Loan Bank of Indianapolis Retirement Savings Plan
DDCP: Directors' Deferred Compensation Plan
EFFR: Effective Federal Funds Rate
Exchange Act: Securities Exchange Act of 1934, as amended
Fannie Mae: Federal National Mortgage Association
FASB: Financial Accounting Standards Board
FHA: Federal Housing Administration
FHLBank: A Federal Home Loan Bank
FHLBanks: The 11 Federal Home Loan Banks or a subset thereof
FHLBank System: The 11 Federal Home Loan Banks and the Office of Finance
FICO®: Fair Isaac Corporation, the creators of the FICO credit score
Finance Agency: Federal Housing Finance Agency
FOMC: Federal Open Market Committee
Form 8-K: Current Report on Form 8-K as filed with the SEC under the Exchange Act
Form 10-K: Annual Report on Form 10-K as filed with the SEC under the Exchange Act
Form 10-Q: Quarterly Report on Form 10-Q as filed with the SEC under the Exchange Act
Freddie Mac: Federal Home Loan Mortgage Corporation
GAAP: Generally Accepted Accounting Principles in the United States of America
Ginnie Mae: Government National Mortgage Association
GSE: United States Government-Sponsored Enterprise
Housing Associate: Approved lender under Title II of the National Housing Act of 1934 that is either a government agency or is chartered under federal or state law with rights and powers similar to those of a corporation
HTM: Held-to-Maturity
JCEA: Joint Capital Enhancement Agreement, as amended, among the 11 FHLBanks
LIBOR: London Interbank Offered Rate
LRA: Lender Risk Account
LTV: Loan-to-Value
MBS: Mortgage-Backed Securities
MCC: Master Commitment Contract
MDC: Mandatory Delivery Commitment
Moody's: Moody's Investor Services
MPP: Mortgage Purchase Program, including Original and Advantage unless indicated otherwise
MRCS: Mandatorily Redeemable Capital Stock
MVE: Market Value of Equity
NEO: Named Executive Officer
NRSRO: Nationally Recognized Statistical Rating Organization
OCI: Other Comprehensive Income (Loss)
PFI: Participating Financial Institution
PMI: Primary Mortgage Insurance
S&P: Standard & Poor's Rating Service
SEC: Securities and Exchange Commission

Securities Act: Securities Act of 1933, as amended
SERP: Collectively, the 2005 FHLBank of Indianapolis Supplemental Executive Retirement Plan, as amended, and the FHLBank of Indianapolis Supplemental Executive Retirement Plan, frozen effective December 31, 2004
SETP: Federal Home Loan Bank of Indianapolis 2016 Supplemental Executive Thrift Plan, as amended and restated
SMI: Supplemental Mortgage Insurance
SOFR: Secured Overnight Financing Rate
TBA: To Be Announced, a forward contract for the purchase or sale of MBS at a future agreed-upon date for an established price
TVA: Tennessee Valley Authority
UPB: Unpaid Principal Balance
WAIR: Weighted-Average Interest Rate

Special Note Regarding Forward-Looking Statements

Statements in this Form 10-K, including statements describing our objectives, projections, estimates or predictions, may be considered to be "forward-looking statements." These statements may use forward-looking terminology, such as "anticipates," "believes," "could," "estimates," "may," "should," "expects," "will," or their negatives or other variations on these terms. We caution that, by their nature, forward-looking statements involve risk or uncertainty and that actual results either could differ materially from those expressed or implied in these forward-looking statements or could affect the extent to which a particular objective, projection, estimate, or prediction is realized. These forward-looking statements involve risks and uncertainties including, but not limited to, the following:

- economic and market conditions, including the timing and volume of market activity, inflation or deflation, changes in the value of global currencies, and changes in the financial condition of market participants;
- volatility of market prices, interest rates, and indices or the availability of suitable interest rate indices, or other factors, resulting from the effects of, and changes in, various monetary or fiscal policies and regulations, including those of the Federal Reserve, the Finance Agency and the Federal Deposit Insurance Corporation, or a decline in liquidity in the financial markets, that could affect the value of investments, or collateral we hold as security for the obligations of our members and counterparties;
- changes in demand for our advances and purchases of mortgage loans resulting from:
    - changes in our members' deposit flows and credit demands;
    - changes in products or services we are able to provide;
    - federal or state regulatory developments impacting suitability or eligibility of membership classes;
    - membership changes, including, but not limited to, mergers, acquisitions and consolidations of charters;
    - changes in the general level of housing activity in the United States and particularly in our district states of Michigan and Indiana, the level of refinancing activity and consumer product preferences;
    - competitive forces, including, without limitation, other sources of funding available to our members; and
    - changes in the terms and conditions of ownership of our capital stock;
- changes in mortgage asset prepayment patterns, delinquency rates and housing values or improper or inadequate mortgage originations and mortgage servicing;
- ability to introduce and successfully manage new products and services, including new types of collateral securing advances;
- political events, including federal government shutdowns, administrative, legislative, regulatory, or other developments, including the Finance Agency report on the FHLBank System, changes in international political structures and alliances, and judicial rulings that affect us, our status as a secured creditor, our members (or certain classes of members), prospective members, counterparties, GSEs generally, one or more of the FHLBanks and/or investors in the consolidated obligations of the FHLBanks;
- national or international crises, including a pandemic, war, acts of terrorism or natural disasters, and the effects of such crises on our and our counterparties' operations, member demand, market liquidity, and the global funding markets, and the governmental, regulatory, and fiscal interventions undertaken to stabilize local, national, and global economic conditions;
- ability to access the capital markets and raise capital market funding on acceptable terms;
- changes in our credit ratings or the credit ratings of the other FHLBanks and the FHLBank System;
- changes in the level of government guarantees provided to other United States and International financial institutions;
- dealer commitment to supporting the issuance of our consolidated obligations;
- ability of one or more of the FHLBanks to repay its portion of the consolidated obligations, or otherwise meet its financial obligations;
- ability to attract and retain skilled personnel;
- ability to develop, implement and support technology and information systems sufficient to manage our business effectively and prevent or mitigate the impact of cyber attacks;
- nonperformance of counterparties to uncleared and cleared derivative transactions;
- changes in terms of derivative agreements and similar agreements;
- loss arising from natural disasters, acts of war, riots, insurrection or acts of terrorism;
- changes in or differing interpretations of accounting guidance; and
- other risk factors identified in our filings with the SEC.

Although we undertake no obligation to revise or update any forward-looking statements, whether as a result of new information, future events or otherwise, additional disclosures may be made through reports filed with the SEC in the future, including our reports on Forms 10-K, 10-Q and 8-K. This Form 10-K, including Business, Risk Factors and Management's Discussion and Analysis of Financial Condition and Results of Operations, should be read in conjunction with our financial statements and notes, which are included in Item 8.

ITEM 1. BUSINESS

As used in this Form 10-K, unless the context otherwise requires, the terms "we," "us," "our," and "Bank" refer to the Federal Home Loan Bank of Indianapolis or its management. Acronyms and terms used throughout this Item are defined herein or in the *Defined Terms*.

Unless otherwise stated, amounts disclosed in this Item are rounded to the nearest million; therefore, dollar amounts of less than one million may not be reflected or, due to rounding, may not appear to agree to the amounts presented in thousands in the *Financial Statements* and related *Notes to Financial Statements*. Amounts used to calculate dollar and percentage changes are based on numbers in the thousands. Accordingly, calculations based upon the disclosed amounts (millions) may not produce the same results.

Background Information

The Federal Home Loan Bank of Indianapolis is a regional wholesale bank that serves its member financial institutions in Michigan and Indiana. We are one of 11 regional FHLBanks across the United States, which, along with the Office of Finance, compose the FHLBank System established in 1932. Each FHLBank is a federal instrumentality of the United States of America that is privately capitalized and funded, receives no Congressional appropriations, and operates as an independent entity with its own board of directors, management, and employees.

Our mission is to provide reliable and readily available liquidity to our member institutions to support housing finance and community development. Our advance and mortgage purchase programs also provide funding to assist members with asset/liability management, interest-rate risk management, mortgage pipelines, and other liquidity needs. In addition to funding, we provide various correspondent services to our members, such as securities safekeeping and wire transfers. We also assist in meeting the economic and housing needs of communities and families through grants and subsidized advances that support affordable housing and economic development initiatives.

As a financial cooperative, our members are also our primary customers. We are generally limited to making advances to and purchasing mortgage loans from members. We do not lend directly to or purchase mortgage loans directly from the general public.

Our principal funding source is the proceeds from the sale to the public of FHLBank debt instruments, known as consolidated obligations, which consist of CO bonds and discount notes. The Office of Finance was established as a joint office of the FHLBanks to facilitate the issuance and servicing of consolidated obligations. The United States government does not guarantee, directly or indirectly, our consolidated obligations, which are the joint and several obligations of all FHLBanks.

We are wholly owned by our member institutions. All federally insured depository institutions (including commercial banks, savings institutions and credit unions), CDFIs certified by the CDFI Fund of the United States Treasury, certain non-federally insured credit unions, and non-captive insurance companies are eligible to become members if they have a principal place of business, or are domiciled, in our district states of Michigan or Indiana. Applicants for membership must meet specific requirements that demonstrate that they are engaged in residential housing finance.

All member institutions are required to purchase a minimum amount of our Class B capital stock as a condition of membership. Only members may own our capital stock, except for former members or their legal successors holding stock during their stock redemption period. Our capital stock is not publicly traded; it is purchased by members from us and redeemed or repurchased by us at the stated par value. With our written approval, a member may transfer any of its capital stock in excess of the required minimum to another member at par value. For additional information regarding our capital plan, see *Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.*

Each FHLBank was organized under the authority of the Bank Act as a GSE, which is an entity that combines elements of private capital, public sponsorship, and public policy. The public sponsorship and public policy attributes of the FHLBanks include:

- an exemption from federal, state, and local taxation, except employment and real estate taxes;
- an exemption from registration under the Securities Act (although the FHLBanks are required by federal law to register a class of their equity securities under the Exchange Act);
- the requirement that at least 40% of our directors be non-member "independent" directors; that two of these "independent" directors have more than four years of experience representing consumer or community interests in banking services, credit needs, housing, or consumer financial protections; and that the remaining "independent" directors have demonstrated knowledge or experience in auditing or accounting, derivatives, financial management, organizational management, project development or risk management practices, or other expertise established by Finance Agency regulations;
- the United States Treasury's authority to purchase up to $4.0 billion of FHLBank consolidated obligations; and
- the required allocation of 10% of annual net earnings before interest expense on MRCS to fund the AHP.

As an FHLBank, we seek to maintain a balance between fulfilling our public policy mission and providing sufficient returns on our members' capital, while maintaining an appropriate risk profile. Consistent with our business model, we place the highest priority on being able to meet our members' liquidity and funding needs in all business and market environments.

The Finance Agency is the federal regulator of the FHLBanks, Fannie Mae and Freddie Mac. The Finance Agency's stated mission is to ensure that the housing GSEs operate in a safe and sound manner so that they serve as a reliable source of liquidity for equitable and sustainable housing finance and community investment throughout the economic cycle.

Membership

Our membership territory is comprised of the states of Michigan and Indiana. The following table presents the composition of our members by type of financial institution.

Type of Institution	December 31, 2023	% of Total	December 31, 2022	% of Total
Commercial banks and savings institutions	164	47 %	165	48 %
Credit unions	138	39 %	131	38 %
Insurance companies	44	13 %	46	13 %
CDFIs	4	1 %	4	1 %
Total member institutions	350	100 %	346	100 %

In 2023, 10 new members were added and 6 members merged, consolidated, relocated or terminated.

Governance

Our board of directors is responsible for the overall oversight and management of the Bank pursuant to the Bank Act. The combination of public sponsorship and private ownership that drives our business model is reflected in the composition of our board of directors. A majority of the directors must be officers and/or directors of our member institutions, while at least 40% of the board must be independent directors. The professional backgrounds of our independent directors cover a wide range of industries and expertise in areas such as financial markets and economics, affordable housing, accounting and technology, including cybersecurity.

We maintain a Strategic Business Plan that provides the framework for our future business direction. The goals and strategies for the Bank's major business activities are encompassed in this plan, which is updated and approved by the board of directors at least annually and at any other time that revisions are deemed necessary.

Operating Segments

We manage our operations by grouping products and services within two operating segments. The segments identify the principal ways we provide services to our members. These segments reflect our two primary mission-asset activities and the manner in which they are managed from the perspective of development, resource allocation, product delivery, pricing, credit risk and operational administration.

These operating segments are (i) traditional, which consists of credit products, investments, and correspondent services and deposits; and (ii) mortgage loans, which consist substantially of mortgage loans purchased from our members through our MPP. The revenues, profit or loss, and total assets for each segment are disclosed in *Notes to Financial Statements - Note 15 - Segment Information*.

Traditional.

Credit Products. We offer our members a wide variety of credit products, including advances, standby letters of credit, and lines of credit. We approve member credit requests based on our assessment of the member's creditworthiness and financial condition, as well as its collateral position. All credit products must be fully collateralized by a member's pledge of eligible assets.

Our primary credit product is advances. Members use advances for a wide variety of purposes including, but not limited to:

- funding for single-family mortgages and multi-family mortgages held in portfolio, including both conforming and non-conforming mortgages (as determined in accordance with secondary market criteria);
- temporary funding during the origination, packaging, and sale of mortgages into the secondary market;
- funding for commercial real-estate loans and, especially with respect to CFIs, funding for small business, small farm, and small agri-business portfolio loans;
- acquiring or holding MBS;
- short-term liquidity;
- asset/liability and interest-rate risk management;
- a cost-effective alternative to holding short-term investments to meet contingent liquidity needs;
- a competitively-priced alternative source of funds, especially with respect to smaller members with less-diverse funding sources; and
- at-cost funding to help support affordable housing and economic development initiatives.

We offer standby letters of credit, typically for up to 10 years in term, which are rated Aaa by Moody's and AA+ by S&P. Letters of credit are performance contracts that guarantee the performance of a member to a third party and are subject to the same collateralization and borrowing limits that are applicable to advances. Letters of credit may be offered to assist members in facilitating residential housing finance, community lending, asset/liability management, or liquidity. We also offer a standby letter of credit product to collateralize public deposits.

We also offer lines of credit which allow members to fund short-term cash needs without submitting a new application for each funding request.

Advances. We offer a wide array of fixed-rate and adjustable-rate advances, on which interest is generally due monthly. The maturities of advances currently offered typically range from 1 day to 10 years, although the maximum maturity may be longer in some instances. Our primary advance products include:

- **Fixed-rate Bullet Advances**, which have fixed rates throughout the term of the advances. These advances are typically referred to as "bullet" advances because no principal payment is due until maturity. Prepayments prior to maturity may be subject to prepayment fees. These advances can include a feature that allows for delayed settlement;
- **Putable Advances**, which are fixed-rate advances that give us an option to terminate the advance prior to maturity based on a predetermined schedule. We consider exercising our option when interest rates have increased since the origination of the advance. Upon our exercise of the option, the member must repay the putable advance, but replacement funding will be available to the member at current market rates;
- **Fixed-rate Amortizing Advances**, which are fixed-rate advances that require principal payments either monthly, annually, or based on a specified amortization schedule and may have a balloon payment of remaining principal at maturity;
- **Adjustable-rate Advances**, which are sometimes called "floaters," reprice periodically based on a variety of indices, including EFFR, SOFR and the FHLBanks cost of funds index. Prepayment terms are agreed to before the advance is extended. Most frequently, no prepayment fees are required if a member prepays an adjustable-rate advance on a reset date, after a pre-determined lock-out period, with the required notification. No principal payment is due prior to maturity;
- **Other Variable-rate Advances**, which reprice daily. These advances may be extended on terms from one day to six months and may be prepaid on any given business day during that term without fee or penalty. No principal payment is due until maturity; and
- **Callable Advances**, which are fixed-rate advances that give the member an option to prepay the advance before maturity on call dates with no prepayment fee, which members normally would exercise when interest rates have decreased since the origination of the advance.

We also offer customized advances to meet the particular needs of our members. Our entire menu of advance products is generally available to each creditworthy member, regardless of the member's asset size. Finance Agency regulations require us to price our credit products consistently and without discrimination to any member applying for advances. We are also prohibited from pricing our advances below our marginal cost of matching term and maturity funds in the marketplace, including embedded options, and the administrative cost associated with extending such advances to members. Therefore, advances are typically priced at standard spreads above our cost of funds. Our board-approved credit policy allows us to offer lower rates on certain types of advances transactions. Determinations of such rates are based on factors such as volume, maturity, product type, funding availability and costs, and competitive factors in regard to other sources of funds.

Collateral. All credit products extended to a member must be fully collateralized by the member's pledge of eligible assets. Each borrowing member and its affiliates that hold pledged collateral are required to grant us a security interest in such collateral.

Collateral Status Categories. We take collateral under a blanket, specific listings or possession status depending on the credit quality of the borrower, the type of institution, and our lien position on assets owned by the member (i.e., blanket, specific, or partially subordinated). The blanket status is the least restrictive and allows the member to retain possession of the pledged collateral, provided that the member executes a written security agreement and agrees to hold the collateral for our benefit. Under the specific listings status, the member maintains possession of the specific collateral pledged, but the member generally provides listings of loans pledged with detailed loan information such as loan amount, payments, maturity date, interest rate, LTV, collateral type and FICO® scores. Members under possession status are required to place the collateral with us or with an approved third-party custodian in amounts sufficient to secure all outstanding obligations.

Eligible Collateral. Eligible collateral types include certain investment securities, one-to-four family first mortgage loans, multi-family first mortgage loans, deposits in our Bank, certain other real estate-related collateral assets (such as commercial MBS, municipal securities, commercial real estate loans and home equity loans), and small business loans or farm real estate loans from CFIs. While we only extend credit based on the borrowing capacity for such approved collateral, our contractual arrangements typically allow us to take other assets as collateral to provide additional protection. In addition, under the Bank Act, we have a lien on the borrower's stock in our Bank as security for all of the borrower's indebtedness.

We have an Anti-Predatory Lending Policy and a Subprime and Nontraditional Residential Mortgage Policy that establish guidelines for any subprime or nontraditional loans included in the collateral pledged to us. Loans that are delinquent or violate those policies do not qualify as acceptable collateral and are required to be removed from any collateral value calculation. Consistent with the CFPB home mortgage lending rules, we accept loans that comply with or are exempt from the ability-to-pay requirements as collateral.

In order to help mitigate the market, credit, liquidity, operational and business risk associated with collateral, we apply an over-collateralization requirement to the book value or market value of pledged collateral to establish its lending value. Collateral that we have determined to contain a low level of risk, such as United States government obligations, is over-collateralized at a lower rate than collateral that carries a higher level of risk, such as small business loans. Standard requirements range from 100% for deposits (cash) to 140% - 155% for residential mortgages pledged through blanket status. Over-collateralization requirements for eligible securities range from 103% to 190%; less traditional types of collateral have standard over-collateralization ratios up to 360%.

The over-collateralization requirement applied to asset classes may also vary depending on collateral status, because lower requirements are applied as our levels of information and control over the assets increase. Over-collateralization requirements are applied using market values for collateral in listing and possession status and book value for collateral pledged through blanket status. In no event, however, would market values assigned to whole loan collateral exceed par value. For more information, see *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Management - Credit Risk Management - Advances and Other Credit Products*.

Collateral Review and Monitoring. We verify collateral balances by performing periodic, collateral audits on our borrowers, which allows us to verify loan pledge eligibility, credit strength and documentation quality, as well as adherence to our Anti-Predatory Lending Policy, our Subprime and Nontraditional Residential Mortgage Policy, and other collateral policies. In addition, collateral audit findings are used to adjust over-collateralization amounts to mitigate credit risk and collateral liquidity concerns.

Investments. We maintain a portfolio of investments, purchased from approved counterparties, members and their affiliates, or other FHLBanks, to provide liquidity, support housing finance, utilize balance sheet capacity and supplement our earnings. Higher earnings bolster our ability to support affordable housing and community development.

Our short-term investments are placed with large, high-quality financial institutions with investment-grade long-term credit ratings. Such investments typically include interest-bearing demand deposit accounts, unsecured federal funds sold and securities purchased under agreements to resell, which are secured by U.S. Treasury obligations. Each may be purchased with either overnight or term maturities, or in the case of demand deposit accounts, redeemed at any time during business hours. In the aggregate, the FHLBanks may represent a significant percentage of the federal funds sold market at any one time, although each FHLBank manages its investment portfolio separately.

Our liquidity portfolio also includes investments in U.S. Treasury obligations.

The longer-term investments typically generate higher returns and consist of (i) securities issued by the United States government, its agencies, and certain GSEs, and (ii) Agency MBS.

All unsecured investments are subject to certain selection criteria. Each unsecured counterparty must be approved and has an exposure limit, which is computed in the same manner regardless of the counterparty's status as a member, affiliate of a member or unrelated party. These criteria determine the permissible amount and maximum term of the investment. For more information, see *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Management - Credit Risk Management - Investments*.

Under Finance Agency regulations, except for certain investments authorized under state trust law for our retirement plans, we are prohibited from investing in the following types of securities:

- instruments, such as common stock, that represent an equity ownership in an entity, other than stock in small business investment companies, or certain investments targeted to low-income persons or communities;
- instruments issued by non-United States entities, other than those issued by United States branches and agency offices of foreign commercial banks;
- non-investment grade debt instruments, other than certain investments targeted to low-income persons or communities and instruments that were downgraded after their purchase;
- whole mortgages or other whole loans, except for:
    - those acquired under an AMA program, such as MPP;
    - certain investments targeted to low-income persons or communities; and
    - certain foreign housing loans authorized under Section 12(b) of the Bank Act; and
- non-United States dollar denominated securities.

In addition, we are prohibited from purchasing certain types of investments, such as interest-only or principal-only stripped MBS, Collateralized Mortgage Obligations ("CMO") and Real Estate Mortgage Investment Conduits ("REMIC"); residual-interest or interest-accrual classes of CMOs, REMICs and MBS; and CMOs or REMICs with underlying collateral containing pay option/negative amortization mortgage loans, unless those loans or securities are guaranteed by the United States government, Fannie Mae, Freddie Mac or Ginnie Mae.

Finance Agency regulation further provides that the total book value of our investments in MBS must not exceed 300% of our total regulatory capital, consisting of Class B stock, Class A stock, if any, retained earnings, and MRCS, as of the day we purchase the investments, based on the capital amount most recently reported to the Finance Agency. If the outstanding balances of our investments in MBS exceed the limitation at any time, but were in compliance at the time we purchased the investments, we would not be considered out of compliance with the regulation, but we would not be permitted to purchase additional investments in MBS until these outstanding balances were within the capital limitation. Generally, our goal is to maintain these investments near the 300% limit.

Deposit Products. Deposit products provide a small portion of our funding resources. We offer several types of deposit products to our members and other institutions including overnight and demand deposits. We may accept uninsured deposits from:

- our members, which they can use to help satisfy their liquidity requirements;
- institutions eligible to become members;
- any institution for which we are providing correspondent services;
- interest-rate swap counterparties;
- other FHLBanks; or
- other federal government instrumentalities.

Mortgage Loans. Mortgage loans held for portfolio consist substantially of residential mortgage loans purchased from our members through our MPP. We may also purchase or participate in mortgage loans under other AMA programs. These programs help fulfill the FHLBank System's housing mission and provide an additional source of liquidity to FHLBank members that choose to sell mortgage loans into the secondary market rather than holding them in their own portfolios. AMA programs are a core mission activity of the FHLBanks, as defined by Finance Agency regulations.

Mortgage Purchase Program.

Overview. We purchase mortgage loans directly from our members through our MPP. Members that participate in the MPP are known as PFIs. By regulation, we are not permitted to purchase loans directly from any institution that is not a member or Housing Associate of the FHLBank System, and we may not use a trust or other entity to purchase the loans. We purchase conforming, medium- or long-term, fixed-rate, fully amortizing, level payment loans predominantly for primary, owner-occupied, detached residences, including single-family properties, and two-, three-, and four-unit properties. Additionally, to a lesser degree, we purchase loans for primary, owner-occupied, attached residences (including condominiums and planned unit developments), and second/vacation homes.

Our mortgage loan purchases are governed by the Finance Agency's AMA regulation. Further, while the regulation does not expressly limit us to purchasing fixed-rate loans, before purchasing adjustable-rate loans we would need to analyze whether such purchases would require Finance Agency approval under its New Business Activity regulation. Such regulation provides that any material change to an FHLBank's business activity that results in new risks or operations needs to be pre-approved by the Finance Agency.

Under Finance Agency regulations, all pools of mortgage loans currently purchased by us, other than government-insured mortgage loans, must have sufficient credit enhancement to be rated by us as at least investment grade. We operate our credit enhancement model and methodology accordingly to estimate the amount of credit enhancement required for those pools. Other than for FHA mortgage loans, the PFIs provide or arrange for the credit enhancement. In this way, the PFIs share the credit risk with us on conventional mortgage loans. We manage the interest-rate risk, prepayment option risk, and liquidity risk.

Our original MPP, which we ceased offering for conventional loans in 2010, relied on credit enhancement from LRA and SMI to achieve an implied credit rating of at least AA based on a NRSRO model in compliance with Finance Agency regulations. In 2010, we began offering Advantage MPP for new conventional MPP loans, which utilizes an enhanced fixed LRA account for credit enhancement consistent with Finance Agency regulations, instead of utilizing a spread LRA with coverage from SMI providers. The only substantive difference between the two programs is the credit enhancement structure. Upon implementation of Advantage MPP, the original MPP was phased out and is no longer being used for acquisitions of new conventional loans. Under Advantage MPP, the funds in the LRA are established at the time of loan purchase. As a result, at the time of pool closing, the LRA is sufficient to cover expected losses in excess of the borrower's equity and PMI, if any, on a pool basis.

Mortgage Standards. All loans we purchase must meet the guidelines for our MPP or be specifically approved as an exception based on compensating factors. Our guidelines generally meet or exceed the underwriting standards of Fannie Mae and Freddie Mac. For example, the maximum LTV ratio for any conventional mortgage loan at the time of purchase is 95%, and borrowers must meet certain minimum credit scores depending upon the type of property or loan. In addition, we will not knowingly purchase any loan that violates the terms of our Anti-Predatory Lending Policy or our Subprime and Nontraditional Residential Mortgage Policy. Furthermore, we require our members to warrant to us that all of the loans sold to us are in compliance with all applicable laws, including prohibitions on predatory lending. All loans purchased through our MPP must qualify as "Safe-Harbor Qualified Mortgages" under CFPB rules.

Under our guidelines, a PFI must:

- be an active originator of conventional mortgages and have servicing capabilities, if applicable, or use a servicer that we approve;
- advise us if it has been the subject of any adverse action by either Fannie Mae or Freddie Mac; and
- along with its parent company, if applicable, meet the capital requirements of each state and federal regulatory agency with jurisdiction over the member's or parent company's activities.

Credit Enhancement. FHA mortgage loans are backed by insurance provided by the United States government and, therefore, no additional credit enhancements (such as an LRA or SMI) are required.

For conventional mortgage loans, the credit enhancement required to reach the minimum credit rating is determined by using a credit risk model. The model is used to evaluate each MCC or pool of MCCs to ensure the LRA percentage as credit enhancement is sufficient. The model evaluates the characteristics of the loans the PFIs actually delivered for the likelihood of timely payment of principal and interest. The model's results are based on numerous standard borrower and loan attributes, such as the LTV ratio and borrower's credit score, as well as housing market factors, such as the Home Price Index and zip code. Based on the credit assessment, we are required to hold risk-based capital to help mitigate the potential credit risk in accordance with the Finance Agency regulations.

Credit losses on defaulted mortgage loans in a pool are absorbed by these sources, until they are exhausted, in the following order:

- borrower's equity;
- PMI, if applicable;
- LRA;
- SMI, if applicable; and
- our Bank.

LRA. We use either a "fixed LRA" or a "spread LRA" for credit enhancement. The fixed LRA is used for all acquisitions of conventional mortgage loans under Advantage MPP, while the spread LRA is used in combination with SMI for credit enhancement of conventional mortgage loans previously purchased under our original MPP.

- *Advantage MPP.* The funding of the fixed LRA occurs at the time we acquire the loan and is based on the principal amount purchased. Depending on the terms of the MCC, the LRA funding amount varies between 110 bps and 135 bps of the principal amount. LRA funds not used to pay loan losses may be returned to the PFI subject to a retention schedule detailed in each MCC based on the original LRA amount. Per the retention schedule, no LRA funds are returned to the PFI for the first five years after the pool is closed to acquisitions. We absorb any losses in excess of available LRA funds.

- *Original MPP.* The spread LRA is funded through a reduction to the net yield earned on the loans, and the corresponding purchase price paid to the PFI reflected our reduced net yield. The LRA for each pool of loans is funded monthly at an annual rate ranging from 6 to 20 bps, depending on the terms of the MCC, and is used to pay loan loss claims or is held until the LRA accumulates to a required "release point." The release point is 20 to 85 bps of the then outstanding principal balances of the loans in that pool, depending on the terms of the original contract. If the LRA exceeds the required release point, the excess amount is eligible for return to the PFI(s) that sold us the loans in that pool, generally subject to a minimum five-year lock-out period after the pool is closed to acquisitions.

SMI. For pools of loans acquired under our original MPP, we have credit protection from loss on each loan, where eligible, through SMI, which provides insurance to cover credit losses to approximately 50% of the property's original value, depending on the SMI contract terms, and subject, in certain cases, to an aggregate stop-loss provision in the SMI policy. Some MCCs that equal or exceed a contract amount of $35 million of total initial principal include an aggregate loss/benefit limit or "stop-loss" that is equal to the total initial principal balance of loans under the MCC multiplied by the stop-loss percentage (ranges from 200 - 400 bps), as is then in effect, and represents the maximum aggregate amount payable by the SMI provider under the SMI policy for that pool. Even with the stop-loss provision, the aggregate of the LRA and the amount payable by the SMI provider under an SMI stop-loss contract will be equal to or greater than the amount of credit enhancement required for the pool to have an implied NRSRO credit rating of at least AA at the time of purchase. Non-credit losses, such as uninsured property damage losses that are not covered by the SMI, can be recovered from the LRA to the extent that there are releasable LRA funds available. We absorb any non-credit losses greater than the available LRA. We do not have SMI coverage on loans purchased under Advantage MPP.

Pool Aggregation. We offer pool aggregation under our MPP. Our pool aggregation program is designed to reduce the credit enhancement costs to small and mid-size PFIs. Under pool aggregation, a PFI's loans are pooled with similar loans originated by other PFIs to create aggregate pools of approximately $100 million original UPB or greater. The combination of small and mid-size PFIs' loans into one pool also assists in the evaluation of the amount of LRA needed for the overall credit enhancement.

Conventional Loan Pricing. When we formulate conventional loan pricing, we consider a number of factors, including market conditions, cost of funding, competition, and regulatory requirements. We also consider the cost of the credit enhancement (LRA and SMI, if applicable). Each of these credit enhancement structures is accounted for, not only in our expected return on acquired mortgage loans, but also in the risk review performed during the accumulation/pooling process.

We typically receive a 0.25% fee on cash-out refinancing transactions with LTVs between 75% and 80%. Our current guidelines do not allow cash-out refinance loans above 80% LTV. We continue to evaluate the scope and rate of such fees as they evolve in the industry. We do not pay a PFI any fees other than the servicing fee when the PFI retains the servicing rights.

Servicing. We do not service the mortgage loans we purchase. PFIs may elect to retain servicing rights for the loans sold to us, or they may elect to sell servicing rights to an MPP-approved servicer.

Those PFIs that retain servicing rights receive a monthly servicing fee and may be required to undergo a review by a third-party quality control contractor that advises the PFIs of any deficiencies in servicing procedures or processes and then notifies us so that we can monitor the PFIs' performance. The PFIs that retain servicing rights can sell those rights at a later date with our approval. If we deem servicing to be inadequate, we can require that the servicing of those loans be transferred to a servicer that is acceptable to us.

The servicers are responsible for all aspects of servicing, including, among other responsibilities, the administration of any foreclosure and claims processes from the date we purchase the loan until the loan has been fully satisfied. Our MPP was designed to require loan servicers to foreclose and liquidate in the servicer's name rather than in our name. As the servicer progresses through the process from foreclosure to liquidation, we are paid in full for all unpaid principal and accrued interest on the loan through the normal remittance process.

It is the servicer's responsibility to initiate claims for losses on the loans. If a loss is expected, no claims are settled until we have reviewed and approved the claim. For loans that are credit-enhanced with SMI, if it is determined that a loss is covered, the SMI provider pays the claim in full and seeks reimbursement from the LRA funds. The SMI provider is entitled to reimbursement for credit losses from funds available in the LRA that are equal to the aggregate amounts contributed to the LRA less any amounts paid for previous claims and any amounts that have been released to the PFI from the LRA or paid to us to cover prior claims. If the LRA has been depleted but is still being funded, based on our contractual arrangement, we and/or the SMI provider are entitled to reimbursement from those funds as they are received, up to the full reimbursable amount of the claim. These claim payments would be reflected as additional deductions from the LRA as they were paid.

Funding Sources

The primary source of funds for each of the FHLBanks is the sale of consolidated obligations, which consist of CO bonds and discount notes. The Finance Agency and the United States Secretary of the Treasury oversee the issuance of this debt in the capital markets. Finance Agency regulations govern the issuance of debt on our behalf and authorize us to issue consolidated obligations through the Office of Finance, under Section 11(a) of the Bank Act. No FHLBank is permitted to issue individual debt without the approval of the Finance Agency.

While the primary liability for consolidated obligations issued to provide funds for a particular FHLBank rests with that FHLBank, consolidated obligations are the joint and several obligations of all of the FHLBanks under Section 11(a). Although each FHLBank is a GSE, consolidated obligations are not obligations of, and are not guaranteed by, the United States government. Consolidated obligations are backed only by the financial resources of all of the FHLBanks and are rated Aaa by Moody's and AA+ by S&P.

Consolidated Obligation Bonds. CO bonds satisfy term funding requirements and are issued with a variety of maturities and terms under various programs. The maturities of these securities may range from 3 months to 30 years, but the maturities are not subject to any statutory or regulatory limit. CO bonds can be fixed- or adjustable-rate and callable or non-callable. Those issued with adjustable-rate payment terms use a variety of indices for interest rate resets, including United States Treasury Bill, Constant Maturity Swap, Prime Rate, SOFR, and others. CO bonds are issued and distributed through negotiated or competitively bid transactions with approved underwriters or selling group members.

Consolidated Obligation Discount Notes. We also issue discount notes to provide short-term funds. These securities can have maturities that range from one day to one year, and are offered daily through a discount note selling group and other authorized securities dealers. Discount notes are generally sold below their face values and are redeemed at par when they mature.

Office of Finance. The issuance of consolidated obligations is facilitated and executed by the Office of Finance, which also services all outstanding debt, provides information on capital market developments to the FHLBanks, and manages our relationship with the NRSROs with respect to consolidated obligations. The Office of Finance also prepares and publishes the FHLBanks' combined quarterly and annual financial reports.

As the FHLBanks' fiscal agent for debt issuance, the Office of Finance can control the timing and amount of each issuance. Through its oversight of the United States financial markets, the United States Treasury can also affect debt issuance for the FHLBanks. For more information, see *Item 1. Business - Supervision and Regulation - Government Corporations Control Act*.

Use of Derivatives

Derivatives are an integral part of our financial management strategies to manage identified risks inherent in our lending, investing and funding activities and to achieve our risk management objectives. Finance Agency regulations and our risk management policies establish guidelines for the use of derivatives. Permissible derivatives include interest-rate swaps, swaptions, interest-rate cap and floor agreements, calls, puts, futures, and forward contracts. We are only permitted to execute derivative transactions to manage interest-rate risk exposure inherent in otherwise unhedged asset or liability positions, hedge embedded options in assets and liabilities including mortgage prepayment risk positions, hedge any foreign currency positions, and act as an intermediary between our members and interest-rate swap counterparties. We are prohibited from trading in or the speculative use of these instruments.

Our use of derivatives is the primary way we align the preferences of investors for the types of debt securities they want to purchase and the preferences of member institutions for the types of advances they want to hold and the types of mortgage loans they want to sell. Consistent with our risk management philosophy, we use interest-rate exchange agreements (i.e., interest-rate swaps) to convert many of the fixed-rate CO bonds that we issue to variable-rate instruments that periodically reset based on an index such as SOFR. Generally, we receive a coupon on the interest-rate swap that is identical to the coupon we pay on the CO bond while paying variable-rate coupon on the interest-rate swap that resets based on the applicable index. Typically, the formula for the variable-rate coupon also includes a spread to the index. For more information, see *Notes to Financial Statements - Note 8 - Derivatives and Hedging Activities* and *Item 7A. Quantitative and Qualitative Disclosures About Market Risk - Use of Derivative Hedges*.

Competition

We operate in a highly competitive environment. Demand for advances is affected by, among other factors, the cost and availability of other sources of liquidity for our members, including customer deposits, brokered deposits, reciprocal deposits and public funds. We compete with other suppliers of wholesale funding, both secured and unsecured. Such other suppliers may include the United States government, the Federal Reserve Banks, corporate credit unions, the Central Liquidity Facility, investment banks, commercial banks, and in certain circumstances other FHLBanks. Large institutions may also have independent access to the national and global credit markets. Also, the availability of alternative funding sources to members, such as growth in deposits from members' banking customers, can significantly influence the demand for advances and can vary as a result of several factors, including legislative or regulatory changes, market conditions, members' creditworthiness, and availability of collateral.

Likewise, our MPP is subject to significant competition. Direct competition for purchases of mortgages comes from other buyers of conventional, conforming, fixed-rate mortgage loans, such as Fannie Mae and Freddie Mac. In addition, PFIs face increased origination competition from originators that are not our members.

We also compete with Fannie Mae, Freddie Mac, and other GSEs as well as corporate, sovereign, and supranational entities for funds raised through the issuance of CO bonds and discount notes. Increases in the supply of competing debt products may, in the absence of increases in demand, result in higher debt costs to us or lesser amounts of debt issued at the same cost than otherwise would be the case.

Affordable Housing Programs, Community Investment and Small Business Grants

Each FHLBank is required to set aside 10% of its annual net earnings to fund its AHP. Through our AHP, we may provide cash grants or interest subsidies on advances to our members, which are, in turn, provided to awarded projects or qualified individuals to finance the purchase, construction, or rehabilitation of very low- to moderate-income owner-occupied or rental housing. Our AHP includes the following:

- Competitive Program, which is the primary grant program to finance the purchase, construction or rehabilitation of housing for individuals with incomes at or below 80% of the median income for the area, and to finance the purchase, construction, or rehabilitation of rental housing, with at least 20% of the units occupied by, and affordable for, very low-income households. Each year, 65% of our annual available AHP funds are granted through this program. AHP-related advances, of which none were outstanding at December 31, 2023, are also part of this program.

- Set-Aside Programs, which include 35% of our annual available AHP funds, are administered through the following:

    - Homeownership Opportunities Program, which provides assistance with down payments and closing costs to first-time homebuyers;
    - Neighborhood Impact Program, which provides rehabilitation assistance to homeowners to help improve neighborhoods;
    - Accessibility Modifications Program, which provides funding for accessibility modifications and minor home rehabilitation for eligible senior homeowners or owner-occupied households with one or more individuals having a permanent disability. In 2024, it will become part of the Neighborhood Impact Program; and
    - Disaster Relief Program, which may be activated at our discretion in cases of federal or state disaster declarations for rehabilitation or down payment assistance targeted to low- or moderate-income homeowner disaster victims. The disaster relief program was not activated in 2023. In 2024, it will be a part of our voluntary programs and therefore any funds disbursed will come from our voluntary allocations.

In addition to our required allocation, which totaled $44 million in 2023, we support and provide voluntary funding to our AHP and various affordable housing, small business and community investment programs. For example, under our Elevate program, we support the growth and development of small businesses in Michigan and Indiana by providing grant funding for capital expenditures, workforce training, or other business-related needs and, under our HomeBoost program, we provide down payment assistance through grant funding to help close the homeownership gap for minority households in Michigan and Indiana. Our voluntary allocation in 2023 totaled $4 million. As a result, our combined required and voluntary allocation in 2023 totaled $48 million. In addition, we incur a significant amount of ongoing operating expenses to administer these programs.

We also offer a variety of specialized advance programs to support housing and community development needs. Through our Community Investment Program, we offer advances to our members involved in community economic development activities benefiting low- or moderate-income families or neighborhoods. These funds can be used for the development of housing, infrastructure improvements, or assistance to small businesses or businesses that are creating or retaining jobs in the member's community for low- and moderate-income families. These advances typically have maturities ranging from overnight to 20 years and are priced at our cost of funds plus reasonable administrative expenses. At December 31, 2023, we had outstanding principal on Community Investment Program-related advances totaling $1.1 billion.

Human Capital Resources

The Bank's human capital is a significant contributor to the successful achievement of our strategic business objectives. In managing the Bank's human capital, we focus on our workforce profile and the various associated programs and philosophies.

Workforce Profile.

Our workforce is substantially comprised of corporate office-based employees, with our operations in Indianapolis, Indiana and limited activities in a hub in Detroit, Michigan. As of December 31, 2023, the Bank had 258 full-time and no part-time employees, of which 57% were male and 43% were female, while 72% were non-minority and 28% were minority.

Our workforce historically has included a large number of longer-tenured employees. As of December 31, 2023, the average tenure of the Bank's employees was 8.5 years. There are no collective bargaining agreements with our employees.

We seek to attract, develop, and retain talented employees to achieve our strategic business objectives and enhance business performance. We strive to both develop talent from within and hire externally, as needed. We believe that developing talent internally results in building bench strength, retaining institutional knowledge, increasing workforce continuity and promoting loyalty and commitment in our employee base, while adding new employees contributes to new ideas, continuous improvement, and our goals of a diverse and inclusive workforce.

Total Rewards.

We recognize and reward performance through a combination of competitive total rewards and development opportunities, including the following:

- Cash compensation
    - Salaries and wages; and
    - Incentive opportunities;
- Benefits and perquisites
    - Medical, dental, and vision insurance;
    - Wellness incentive opportunities;
    - Life, long-term disability, and other insurance coverages;
    - 401(k) retirement savings plan for which the Bank matches certain contributions;
    - Pension benefits or additional, non-elective defined contributions by the Bank;
    - Health Savings Account and Flexible Spending Accounts; and
    - Additional voluntary benefit opportunities
- Wellness programs
    - Employee assistance program;
    - Health coaching;
    - Interactive education sessions; and
    - Use of our insurance provider's rewards app to inspire achievement of fitness and health goals;
- Employee engagement
    - Employee resource groups; and
    - Cultural awareness and inclusion activities/events;
- Work/Life balance
    - 100% paid salary continuation for short-term disability, parental and military leave, bereavement, jury duty, and certain court appearances;
    - Hybrid workforce model; and
    - Vacation, sick time, birthday holiday, Bank holidays, and certain volunteer opportunities;
- Development
    - Training focused on leadership development, employee engagement, and skill enhancement;
    - Educational assistance programs and student loan repayment assistance;
    - Internal educational and development opportunities; and
    - Fee reimbursement for external educational and development programs;
- Management succession planning
    - Our board and executive leadership actively engage in succession planning, with a defined plan for our President-CEO, Executive Vice Presidents, and Senior Vice Presidents.

Performance Management.

Our performance management framework includes establishing individual performance goals tailored to reflect business and development objectives while also reflecting our guiding principles for our corporate culture, periodic performance check-ins, and annual performance reviews. Overall annual performance ratings are calibrated and salary adjustments are differentiated for our highest performers.

Diversity, Equity, and Inclusion Program.

Our Diversity, Equity, and Inclusion program is a strategic business priority. Our Senior Vice President – Chief Human Resources and Diversity, Equity & Inclusion Officer is a member of our executive management team, reports directly to our President-CEO, and serves as a liaison to the board of directors. We recognize that diversity increases capacity for innovation and creativity, that equity recognizes the essential contributions of all of our employees, and that inclusion allows us to leverage the unique perspectives of all employees and strengthens our retention efforts. We evaluate inclusive behaviors as part of our annual performance management process.

Our commitment is demonstrated through the annual development and execution of a three-year Diversity, Equity, and Inclusion Strategic Plan ("DEI Strategic Plan"). The DEI Strategic Plan focuses on Workforce, Workplace, Community, Supplier Diversity, and Capital Markets and includes quantifiable metrics to measure the program's success, which are reported regularly to senior management and the board of directors. We consider learning an important component of our DEI Strategic Plan, so we offer a range of opportunities for our employees to connect and grow personally and professionally through our Diversity, Equity, and Inclusion Council, Cultural Ambassadors, FHLBI Cares, cultural awareness events, and employee resource groups.

Supervision and Regulation

Our business is subject to extensive regulation and supervision. The laws and regulations to which we are subject cover all key aspects of our business, and directly and indirectly affect our product and service offerings, pricing, competitive position, strategic plan, relationships with members and third parties, capital structure, cash needs and uses, and information security. As discussed throughout this Form 10-K, such regulations can have a significant effect on key drivers of our results of operations.

We are supervised and regulated by the Finance Agency, an independent agency in the executive branch of the United States government, established by the Housing and Economic Recovery Act of 2008. The Finance Agency is headed by a Director, who is appointed to a five-year term by the President of the United States, with the advice and consent of the Senate.

The Finance Agency's responsibility is to ensure that, pursuant to the Bank Act and regulations promulgated by the Finance Agency, each FHLBank:

- carries out its housing finance mission;
- remains adequately capitalized and able to raise funds in the capital markets; and
- operates in a safe and sound manner.

The Housing and Economic Recovery Act of 2008 also established the Federal Housing Finance Oversight Board, comprised of the Secretaries of the Treasury and the United States Department of Housing and Urban Development, the Chair of the SEC, and the Finance Agency Director. The Federal Housing Finance Oversight Board functions as an advisory body to the Finance Agency Director.

The Finance Agency's operating expenses are funded by assessments on the FHLBanks, Fannie Mae and Freddie Mac. As such, no tax dollars or other appropriations support the operations of the Finance Agency or the FHLBanks. In addition to reviewing our submissions of monthly and quarterly information on our financial condition and results of operations, the Finance Agency conducts annual examinations and performs periodic reviews in order to assess our safety and soundness.

The United States Treasury receives a copy of the Finance Agency's annual report to Congress, monthly reports reflecting the FHLBank System's securities transactions, and other reports reflecting the FHLBank System's operations. Our annual financial statements are audited by an independent registered public accounting firm in accordance with standards issued by the Public Company Accounting Oversight Board, as well as the government auditing standards issued by the United States Comptroller General. The Comptroller General has authority under the Bank Act to audit or examine the Finance Agency and the FHLBank System and to decide the extent to which they fairly and effectively fulfill the purposes of the Bank Act. The Finance Agency's Office of Inspector General also has investigation authority over the Finance Agency and the FHLBank System.

Each FHLBank is required to maintain a capital structure comprised of Class A stock, Class B stock, or both. A member can redeem Class A stock upon six months' prior written notice to its FHLBank. A member can redeem Class B stock upon five years' prior written notice to its FHLBank. Class B stock has a higher weighting than Class A stock for purposes of calculating the minimum leverage requirement applicable to each FHLBank.

The Bank Act requires that each FHLBank maintain permanent capital and total capital in sufficient amounts to comply with specified, minimum risk-based capital and leverage capital requirements. From time to time, for reasons of safety and soundness, the Finance Agency may require one or more individual FHLBanks to maintain more permanent capital or total capital than is required by the regulations. Failure to comply with these requirements or the minimum capital requirements could result in the imposition of operating agreements, cease and desist orders, civil money penalties, and other regulatory action, including involuntary merger, liquidation, or reorganization as authorized by the Bank Act.

Government Corporations Control Act. We are subject to the Government Corporations Control Act, which provides that, before we can issue and offer consolidated obligations to the public, the Secretary of the United States Treasury must prescribe the form, denomination, maturity, interest rate, and conditions of the obligations; the way and time issued; and the selling price.

Furthermore, this Act provides that the United States Comptroller General may review any audit of the financial statements of an FHLBank conducted by an independent registered public accounting firm. If the Comptroller General undertakes such a review, the results and any recommendations must be reported to Congress, the Office of Management and Budget, and the FHLBank in question. The Comptroller General may also conduct a separate audit of any of our financial statements.

Federal Securities Laws. Our shares of Class B stock are registered with the SEC under the Exchange Act, and we are generally subject to the information, disclosure, insider trading restrictions, and other requirements under the Exchange Act, with certain exceptions. Our capital plan authorizes us to also issue Class A stock, but we have not issued any such stock. We are not subject to the registration provisions of the Securities Act.

Federal and State Banking Laws. We are generally not subject to the state and federal banking laws affecting United States retail depository financial institutions. However, the Bank Act requires the FHLBanks to submit reports to the Finance Agency concerning transactions involving loans and other financial instruments that involve fraud or possible fraud. In addition, we are required to maintain an anti-money laundering program, under which we are required to report suspicious transactions to the Financial Crimes Enforcement Network pursuant to the Bank Secrecy Act and the USA Patriot Act.

We contract with third-party compliance firms to perform certain services on our behalf to assist us with our compliance with these regulations as they are applicable to us. Finance Agency regulations require that we monitor and assess our third-party firms' performance of the services. As we identify deficiencies in our third-party firms' performance, we seek to remediate the deficiencies. Under certain circumstances, we are required to notify the Finance Agency about the deficiencies and our response to assure our compliance with these regulations.

As a wholesale secured lender and a secondary market purchaser of mortgage loans, we are not, in general, directly subject to the various federal and state laws regarding consumer credit protection, such as anti-predatory lending laws. However, as non-compliance with these laws could affect the value of these loans as collateral or acquired assets, we require our members to warrant that all of the loans pledged or sold to us are in compliance with all applicable laws.

Available Information

Our Annual, Quarterly and Current Reports on Forms 10-K, 10-Q, and 8-K, are filed with the SEC through the EDGAR filing system. Links to our reports are available on our public website at www.fhlbi.com by selecting "Resources" and then "Investor Relations."

We have a Code of Ethics for Senior Financial Officers ("Code of Ethics") that applies to our principal executive officer, principal financial officer, and principal accounting officer. We additionally have a Code of Conduct and Conflict of Interest Policy for Affordable Housing Advisory Council Members, a Code of Conduct and Conflict of Interest Policy for Directors, and a Code of Conduct and Conflict of Interest Policy for Employees and Contractors (collectively, the "Codes of Conduct"). The Code of Ethics and Codes of Conduct are available on our website at www.fhlbi.com by selecting "About" and then "Corporate Governance."

Our 2024 Targeted Community Lending Plan describes our plan to address the credit needs and market opportunities in our district states of Michigan and Indiana. It, along with our 2024 AHP Implementation Plan, is available on our website at www.fhlbi.com by selecting "Resources" and then selecting "AHP Implementation Plan."

The written charters adopted by the board for its Audit, Executive/Governance, and Human Resources and Compensation Committees are available on our website at www.fhlbi.com by selecting "About" and then selecting "Corporate Governance." These charters were most recently amended by the board of directors as to the Audit Committee on March 24, 2023, as to the Executive/Governance Committee on January 19, 2024, and as to the Human Resources and Compensation Committee on January 19, 2024.

We provide our website address and the SEC's website address solely for information. Except where expressly stated, information appearing on our website and the SEC's website is not incorporated into this Form 10-K.

Anyone may also request a copy of any of our public financial reports, our Code of Ethics, our Codes of Conduct, or our 2024 Targeted Community Lending Plan through our Corporate Secretary at FHLBank of Indianapolis, 8250 Woodfield Crossing Boulevard, Indianapolis, IN 46240, (317) 465-0200.

ITEM 1A. RISK FACTORS

We use acronyms and terms throughout this Item that are defined herein or in the *Defined Terms*.

We have identified the following risk factors that could have a material adverse effect on our Bank. There may be other risks and uncertainties, including those discussed elsewhere in this Form 10-K, that are not described in these risk factors.

Business Risk - Economic

Economic Conditions and Policy, or Global Political or Economic Events Could Have an Adverse Effect on Our Business, Liquidity, Financial Condition, and Results of Operations.

Our business, liquidity, financial condition, and results of operations are sensitive to general domestic and international business and economic conditions, and the strength of the local economies in which we conduct business.

Our business and results of operations are significantly affected by the monetary and fiscal policies of the United States government and its agencies, including the Federal Reserve through its regulation of the supply of money and credit in the United States. These policies are directly impacted by prevailing economic conditions in the United States.

For example, efforts of the Federal Reserve Board to ease inflation, such as increases in the federal funds interest rate during 2022 and 2023, contributed to significant volatility in the financial markets, financial difficulties experienced by some depository institutions, and uncertainties about the economic outlook, including concerns about a possible recession. Such increases also either directly or indirectly influenced the yield on interest-earning assets, volatility of interest rates, prepayment speeds, the cost of interest-bearing liabilities and the demand for advances and for our debt.

As another example, a partial or complete federal government shutdown could affect us. If legislation extending funding for federal agencies is not enacted on a timely basis, some agencies could shut down. An extended shutdown of federal agencies could adversely impact the general economy and, in turn, demand for our products and services.

Additionally, we are affected by the global economy through our investments and capital markets exposures. Global political, economic, and business uncertainty can lead to increased volatility in capital markets or disruptions in the financial markets. Such volatility or disruptions could adversely affect us in many ways, including reduced market access to funding and increased costs of funding. Prolonged disruptions may also result in decreased valuations of, and reduced market and book yields on, our assets.

By way of example, the ongoing hostilities between Russia and Ukraine and throughout the Middle East have led to economic and trade disruptions as well as sanctions. These and related developments have created uncertainty leading to increased volatility in certain capital markets from time to time. They have also been cited as contributing to upward pressure on inflation and weighing on global economic activity.

We Are Directly Impacted by the Condition of the Housing and Residential Mortgage Markets Especially Those Markets' Conditions in Our District.

Of particular note among business and economic conditions, our business and results of operations are sensitive to the condition of the housing and residential mortgage markets. Adverse trends in the mortgage lending sector, including declines in home prices or loan performance, could reduce the value of collateral securing our advances and the fair value of our MBS. Such reductions in value would increase the possibility of under-collateralization, thereby increasing the risk of loss in case of a member's failure. Also, deterioration in the residential mortgage markets could negatively affect the value of our MPP portfolio, resulting in an increase in the allowance for credit losses on mortgage loans.

Our district is comprised of the states of Michigan and Indiana. Increases in unemployment and foreclosure rates or decreases in job or income growth rates in either state could result in less demand for mission-related assets and in turn, adversely affect our profitability and results of operations.

Business Risk - Legislative and Regulatory

Changes in the Legislative and Regulatory Environment for FHLBanks, Our Members, Our Debt Underwriters and Investors, or Other Housing GSEs May Adversely Affect Our Business, Demand for Products, the Cost of Debt Issuance, and the Value of FHLBank Membership.

We could be adversely affected by: the adoption of new or revised laws, policies, regulations or accounting guidance; new or revised interpretations or applications of laws, policies, or regulations by the Finance Agency, the SEC, the United States Commodity Futures Trading Commission, the CFPB, the Financial Stability Oversight Council, the Comptroller General, the FASB or other federal or state financial regulatory bodies; or judicial decisions that alter the present regulatory environment. Likewise, whenever federal elections result in changes in the executive branch or in the balance of political parties' representation in Congress, there is increased uncertainty as to potential administrative, regulatory and legislative actions that may adversely affect our business.

One potential source of important regulatory change could stem from a November 2023 Finance Agency report on the FHLBank System. The report focuses on the FHLBank System's: (i) mission; (ii) role as a stable and reliable source of liquidity; (iii) role in housing and community development; and (iv) operational efficiency, structure and governance. Among other things, the Finance Agency has indicated that it plans to:

- update and clarify its regulatory statement of the FHLBanks' mission to explicitly incorporate the core objective of providing liquidity to members and supporting housing and community development;
- clarify the FHLBanks' liquidity role and take steps to better position the FHLBanks to perform their liquidity function;
- expand the FHLBanks' housing and community development focus, including proposing to recommend that Congress consider amending the Bank Act to at least double the minimum required annual AHP contributions by the FHLBanks; and
- promote the FHLBanks' operational efficiency through collaboration among the FHLBanks, harmonized membership eligibility requirements and optimized board governance, and consider whether realignment and consolidation of the FHLBanks are necessary.

We are not yet able to predict what changes will ultimately result from the Finance Agency's recommendations in the report nor are we able to predict the extent or timing of such changes. However, such changes as well as the increased scrutiny of us and the FHLBank System and our mission and activities could negatively affect our business operations, results of operations and reputation, and the value of FHLBank membership.

Environmental, Social and Governance, or ESG, matters could also lead to enhanced governmental, regulatory or societal attention on us or the FHLBank System in general. Such attention could lead to additional legislation or regulations increasing our compliance costs and operational burdens. For example, rules and legislation on climate change could result in significant additional disclosure requirements with attendant operational burdens and costs. Further, we could become subject to obligations to monitor the use of the proceeds of advances to avoid their deployment to societally-disfavored industries. Such impacts could adversely affect our business and results of operations.

Members. Changes impacting the environment in which our members provide financial products and services could negatively impact their ability to take full advantage of our products and services, their desire to maintain membership in our Bank, or our ability to rely on their pledged collateral. For example, increases in interest rates and the corresponding declines in the values of certain assets could cause one or more of our members to have negative tangible capital. We are generally prohibited from making advances to members that do not have positive tangible capital. Thus, further rises in market interest rates could prevent us from making advances to certain members and, in turn, adversely affect our financial condition and results of operations.

Products and Services. Changes that limit or prohibit the creation of new products or services could negatively impact our earnings and reduce the value of FHLBank membership. For example, our earnings could be negatively impacted by legislative or regulatory changes that (i) reduce demand for advances or limit advances we make to our members, (ii) further restrict the products and services we are able to provide to our members or how we do business with our members and counterparties, (iii) further restrict the types, characteristics or volume of mortgages that we may purchase through our MPP or otherwise reduce the economic value of MPP to our members, or (iv) otherwise require us to change the composition of our assets and liabilities. Any resulting inability to adapt products and services to evolving industry standards and member preferences in a highly competitive and regulated environment, while managing our expenses, could harm our business.

Assets and Collateral. Changes that impact the types or values of assets we own or the collateral we hold could increase our risk of credit loss. For example, CFPB rules include standards for mortgage lenders to follow during the loan approval process to determine whether a borrower has the ability to repay. Failure to satisfy those standards provides the borrower with certain rights that could impede or prevent the lender from foreclosing in the event of the borrower's default. Any party that acquires the loan from the lender could be similarly impeded or prevented from foreclosing. We accept mortgage loans as collateral and purchase mortgage loans under AMA programs, particularly MPP. Our risk of credit loss would tend to be higher on mortgage loans that did not comply with the CFPB's standards given the possibility of the related borrower to impede or prevent us from realizing upon the mortgage loan in the event of default. Accordingly, the CFPB's rules could increase our risk of credit loss. The possible impacts of the realization of an increased risk of credit loss are discussed under *"An Increase in Our Exposure to Credit Losses Could Adversely Affect Our Financial Condition and Results of Operations."*

Liquidity and Capital. Changes impacting liquidity or capital could adversely affect our results of operations. For example, we are subject to various liquidity requirements, which constrain our ability to invest excess cash flow in higher yielding assets from time to time. If liquidity requirements are increased, we could be further restrained from otherwise investing in higher yielding assets thereby adversely affecting our earnings. Similarly, we are subject to various capital requirements. If such requirements are increased, it could result in the realization of the risks discussed under *"A Failure to Meet Minimum Regulatory Capital Requirements Could Affect Our Ability to Pay Dividends, Redeem or Repurchase Capital Stock, Retain Existing Members and Attract New Members."* By way of further example, we, together with the other FHLBanks, currently play a predominant role as lenders in the federal funds markets. Accordingly, any disruptions in the federal funds market or any related regulatory or policy change may adversely affect our cash management activities, results of operations and reputation.

Growth. Changes may either directly or indirectly restrict our growth. For example, the Finance Agency could issue an order requiring us to further constrain our growth in acquisition of assets via MPP.

Underwriters and Investors. Changes affecting our debt underwriters and investors, particularly revised capital and liquidity requirements, could also adversely affect our cost of issuing debt in the capital markets. For example, a significant number of investors in FHLBank short-term consolidated obligations are money market funds. However, if these investors risk and return preferences or regulatory requirements shift, their demand for this debt could decrease. Such a decrease could, due to the FHLBanks' concentration in money market investors, lead to an inability to access funding on acceptable terms.

Other Housing GSEs. Changes impacting other housing GSEs, including those that give preference to certain sectors, business models, regulated entities, assets, or activities, could negatively impact us. For example, changes in the statuses of Fannie Mae and Freddie Mac as a result of legislative or regulatory changes, may impact funding costs for the FHLBanks, which could negatively affect our business and results of operations. In addition, negative news articles, industry reports, and other announcements pertaining to GSEs, including Fannie Mae, Freddie Mac or the FHLBanks, could cause an increase in interest rates on all GSE debt, as investors may perceive these issuers or their debt instruments as bearing increased risk.

FHLBank Membership. Changes that reduce the benefits of FHLBank membership or restrict the eligibility for FHLBank membership could negatively impact our results of operations.

A Failure to Meet Minimum Regulatory Capital Requirements Could Affect Our Ability to Pay Dividends, Redeem or Repurchase Capital Stock, Retain Existing Members and Attract New Members.

We are required to maintain sufficient capital to meet specific minimum requirements established by the Finance Agency. If we violate any of these requirements or if our board or the Finance Agency determines that we have incurred, or are likely to incur, losses resulting, or expected to result, in a charge against capital, we would not be able to redeem or repurchase any capital stock while such charges are continuing or expected to continue, even if the statutory redemption period had expired for some or all of such stock. Violations of, or regulator-mandated adjustments to, our capital requirements could also restrict our ability to pay dividends, lend, invest, or purchase mortgage loans or participating interests in mortgage loans, or other business activities. Moreover, the Finance Agency could set varying expectations for FHLBanks' capital levels in ways that have potentially negative impacts on FHLBanks' business activities. Additionally, the Finance Agency could direct us to call upon our members to purchase additional capital stock to meet our minimum regulatory capital requirements. Members may be unable or unwilling to satisfy such calls for additional capital, thereby adversely affecting their ability to continue doing business with us and their desire to remain as members. Moreover, failure to pay dividends or redeem or repurchase stock at par, or a call upon our members to purchase additional stock to restore capital, could make it more difficult for us to attract new members.

The formula for calculating risk-based capital includes factors that depend on interest rates and other market metrics outside our control and could cause our minimum requirement to increase to a point exceeding our capital level. Further, if our retained earnings were to become inadequate, the Finance Agency could initiate restrictions consistent with those associated with a failure of a minimum capital requirement.

Restrictions on the Redemption, Repurchase, or Transfer of the Bank's Capital Stock Could Result in an Illiquid Investment for the Holder, Which Could Affect Member Interest in Our Products with Capital Stock Purchase Requirements and Our Ability to Retain Existing Members and Attract New Members.

Subject to applicable law and the terms of our capital plan, our capital stock may be redeemed upon the expiration of a five-year redemption period. In addition, subject to applicable law, we may elect to repurchase some or all of the excess capital stock of a shareholder at any time at our sole discretion.

There is no guarantee, however, that we will be able to redeem shareholders' capital stock, even at the end of the prescribed redemption period, or to repurchase their excess capital stock. If a redemption or repurchase of capital stock would cause us to fail to meet our minimum regulatory capital requirements, Finance Agency regulations and our capital plan would prohibit the redemption or repurchase. Restrictions on the redemption or repurchase of our capital stock could result in an illiquid investment for holders of our stock. In addition, because our capital stock may only be owned by our members (or, under certain circumstances, former members and certain successor institutions), and our capital plan requires our approval before a member or nonmember shareholder may transfer any of its capital stock to another member or nonmember shareholder, we cannot provide assurance that we would allow a member or nonmember shareholder to transfer any excess capital stock to another member or nonmember shareholder at any time.

Any such illiquidity could negatively affect member interest in conducting business with us when such business includes a requirement to purchase capital stock. Further, it could cause existing members to take steps to withdraw from membership and disincentivize prospective members from joining us. Any resulting loss of business could then negatively affect our results of operations and financial condition.

Business Risk - Strategic

A Loss of Significant Borrowers, PFIs, Acceptable Loan Servicers or Other Financial Counterparties Could Adversely Impact Our Profitability, Our Ability to Achieve Business Objectives, Our Ability to Pay Dividends or Redeem or Repurchase Capital Stock, and Our Risk Concentration.

Significant Borrowers. The loss of any significant borrower or PFI could adversely impact our profitability and our ability to achieve business objectives. This could result from a variety of factors, including acquisition, consolidation of charters within a bank holding company, a member's loss of market share, resolution of a financially distressed member, or regulatory changes relating to FHLBank membership. The loss of a significant borrower could lead to a related decrease in advances outstanding. Our largest borrowers are listed in *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Management - Credit Risk Management - Advances and Other Credit Products - Concentration*.

Significant PFIs. During the year ended December 31, 2023, our top-selling PFI sold us mortgage loans totaling $422 million, or 26% of the total mortgage loans purchased by the Bank in 2023. Our larger PFIs originate mortgages on properties in several states. We also purchase mortgage loans from many smaller PFIs that predominantly originate mortgage loans on properties in Michigan and Indiana. Our concentration of MPP loans on properties in Michigan and Indiana could continue to increase over time, as we do not currently limit such concentration.

Loan Servicers. We do not service the mortgage loans we purchase. PFIs may elect to retain servicing rights for the loans sold to us, or they may elect to sell servicing rights to an MPP-approved servicer. A scarcity of qualified mortgage servicers could adversely affect our results of operations.

Competition Could Negatively Impact Advances, the Supply of Mortgage Loans for our MPP, Our Access to Funding and Our Earnings.

We operate in a highly competitive environment. Demand for advances is affected by, among other factors, the cost and availability of other sources of liquidity for our members, including customer deposits, brokered deposits, reciprocal deposits and public funds. We compete with other suppliers of wholesale funding, both secured and unsecured. Such other suppliers may include the United States government, the Federal Reserve Banks, corporate credit unions, the Central Liquidity Facility, investment banks, commercial banks, and in certain circumstances other FHLBanks. Large institutions may also have independent access to the national and global credit markets. Also, the availability of alternative funding sources to members, such as growth in deposits from members' banking customers, can significantly influence the demand for advances and can vary as a result of several factors, including legislative or regulatory changes, market conditions, members' creditworthiness, and availability of collateral. By way of example, on March 12, 2023, the Federal Reserve implemented a bank term funding program to support federally-insured depository institutions in response to prevailing market uncertainty about the banking industry resulting from the insolvencies of certain regional depository institutions. Loans under the program are made on very favorable terms and, as a result, have been a competitive alternative to our advances. The program is scheduled to terminate in March 2024. However, loans under the program can remain outstanding for up to one year from the termination date of the program. For additional information, see *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Recent Accounting and Regulatory Developments - Legislative and Regulatory Developments.*

Likewise, our MPP is subject to significant competition. Direct competition for purchases of mortgages comes from other buyers of conventional, conforming, fixed-rate mortgage loans, such as Fannie Mae and Freddie Mac.

In addition, PFIs face increased origination competition from originators that are not our members. Increased competition can result in a smaller share of the mortgages available for purchase through our MPP and, therefore, lower earnings.

We also compete with Fannie Mae, Freddie Mac, and other GSEs as well as corporate, sovereign, and supranational entities for funds raised through the issuance of CO bonds and discount notes. Increases in the supply of competing debt products may, in the absence of increases in demand, result in higher debt costs to us or lesser amounts of debt issued at the same cost than otherwise would be the case. There can be no assurance that our supply of funds through issuance of consolidated obligations will be sufficient to meet our future operational needs.

Downgrades of Our Credit Rating, the Credit Rating of One or More of the Other FHLBanks, or the Credit Rating of the Consolidated Obligations Could Adversely Impact Our Cost of Funds, Our Ability to Access the Capital Markets, and/or Our Ability to Enter Into Derivative Instrument Transactions on Acceptable Terms.

The FHLBanks' consolidated obligations are rated Aaa/P-1 with a negative outlook by Moody's and AA+/A-1+ with a stable outlook by S&P. Rating agencies may from time to time lower a rating or issue negative reports. Because each FHLBank has joint and several liability for all FHLBank consolidated obligations, negative developments at any FHLBank may affect these credit ratings or result in the issuance of a negative report regardless of an individual FHLBank's financial condition and results of operations. In addition, because of the FHLBanks' GSE status, the credit ratings of the respective FHLBanks are generally influenced by the sovereign credit rating of the United States.

Based on the credit rating agencies' criteria, downgrades to the United States' sovereign credit rating and outlook may occur. As a result, similar downgrades in the credit ratings and outlook on the FHLBanks and the FHLBanks' consolidated obligations may also occur, even though they are not obligations of the United States. For example, in November 2023, Moody's changed the outlook on the ratings of the United States to negative from stable, and then, likewise changed the outlook on the ratings of the FHLBanks to negative from stable. If the sovereign credit rating is downgraded, the credit rating of each FHLBank and the FHLBanks' consolidated obligations and outlooks may also be downgraded.

Downgrades in the credit ratings and outlooks, especially a downgrade to an S&P AA rating or equivalent, could result in higher funding costs, additional collateral posting requirements for certain derivative instrument transactions, or disruptions in our access to capital markets. To the extent that we cannot access funding when needed on acceptable terms to effectively manage our cost of funds, our financial condition and results of operations and the value of membership in our Bank may be negatively affected.

Board Eligibility Requirements May Result in Loss of Expertise and Talent from our Board of Directors, and Any Inability to Attract and Retain Key Personnel Could Adversely Affect Our Operations, Our Results of Operations, and Our Ability to Satisfy our Mission.

Board of Directors. The talent and experience of our board of directors is critical to our ability to satisfy our mission given the global nature and resulting, ever-growing complexities of the finance industry. However, our directors are subject to eligibility requirements that could result in the loss of talent and experience. The eligibility requirements are described in *Item 10. Directors, Executive Officers and Corporate Governance - Board of Directors*. For example, our board of directors' seats are subject to specific term limits. As a result, the chair of our board will be term-limited as of December 31, 2024. She has served as a Bank director for over eleven years. Thus, the term limits will result in the board's loss of her talent and experience. Accordingly, director eligibility requirements have resulted and may continue to result in the loss of expertise and talent from our board.

Key Personnel. We rely on key personnel for many of our functions and have a relatively small workforce, given the size and complexity of our business. Our ability to attract and retain personnel with the required technical expertise and specialized skills is important for us to manage our business and conduct our operations successfully. However, competition for such personnel from within the financial services industry, including for risk management professionals, and from businesses outside the financial services industry, including the technology industry, have challenged and may continue to challenge our ability to recruit and retain such personnel. For example, we have experienced and continue to experience elevated competition in hiring and retaining skilled key personnel due to the significant disruptions and changes to the U.S. labor market. Increased remote-working opportunities have also increased competition in hiring and retaining skilled key personnel. Failure to attract and retain skilled key personnel, or failure to develop and implement an effective succession plan for key personnel, could adversely affect our business and operations and, in turn, our results of operations.

Credit Risk

An Increase in Our Exposure to Credit Losses Could Adversely Affect Our Financial Condition and Results of Operations.

We are exposed to credit risk as part of our normal business operations through member products, mortgage servicers, investment securities and counterparty obligations. Periods of economic downturn, and periods of economic and financial disruptions and uncertainties, may increase credit risk.

<u>*Member Products.*</u>

Advances. If a member fails and the appointed receiver or rehabilitator (or another applicable entity) does not either (i) promptly repay all of the failed institution's obligations to us or (ii) properly assign or assume the outstanding advances, we may be required to liquidate the collateral pledged by the failed institution. The proceeds realized from the liquidation may not be sufficient to fully satisfy the amount of the failed institution's obligations plus the operational cost of liquidation, particularly if market price and interest-rate volatility adversely affect the value of the collateral. Price volatility could also adversely impact our determination of over-collateralization requirements, which could ultimately cause a collateral deficiency in a liquidation scenario. In some cases, we may not be able to liquidate the collateral for the value assigned to it or in a timely manner. Any of these scenarios could cause us to experience a credit loss, which in turn could adversely affect our financial condition and results of operations.

A further deterioration of commercial real estate property values could further affect the loans or MBS pledged as collateral for advances. For example, conditions in the national commercial real estate market are generally challenging with weak leasing demand and lower occupancy rates together with higher interest rates weighing on the abilities of borrowers to service their loans. These factors have also generally reduced the market value of such loans and MBS backed by commercial loans. In order to remain fully collateralized, we may require members to pledge additional collateral when we deem it necessary. If members are unable to fully collateralize their obligations with us, our advances could decrease further, negatively affecting our results of operations or ability to pay dividends or redeem or repurchase capital stock.

Mortgage Loans. If delinquencies in our fixed-rate mortgages increase and residential property values decline, we could experience reduced yields or losses exceeding the protection provided by the LRA and SMI credit enhancement, as applicable, on mortgage loans that we have purchased.

We are the beneficiary of third-party PMI and SMI (where applicable) coverage on conventional mortgage loans that we acquire through our MPP, and we rely in part on such coverage to reduce the risk of losses on those loans. As a result of actions by their respective state insurance regulators, however, certain of our PMI providers may pay less than 100% of the claim amounts. The remaining amounts are deferred until the funds are available or the PMI provider is liquidated. It is possible that insurance regulators may impose restrictions on the ability of our other PMI/SMI providers to pay claims. If our PMI/SMI providers further reduce the portion of mortgage insurance claims they will pay to us or further delay or condition the payment of mortgage insurance claims, or if additional adverse actions are taken by their state insurance regulators, we could experience higher losses on mortgage loans.

<u>*Mortgage Servicers.*</u> We are also exposed to credit losses from servicers of mortgage loans that we have purchased if such servicers fail to perform their contractual obligations.

<u>*Investment Securities.*</u> We invest in Agency MBS. Accordingly, declines in housing prices, as well as other factors, such as increased loan default rates and loss severities and decreased prepayment speeds, may result in unrealized losses on our investment securities, which could adversely affect our financial condition.

<u>*Counterparty Obligations.*</u> We assume unsecured credit risk when entering into money market transactions and financial derivatives transactions with domestic and foreign counterparties or through derivatives clearing organizations. A counterparty default could result in losses if our credit exposure to that counterparty is not fully collateralized or if our credit obligations associated with derivative positions are over-collateralized. The insolvency or other inability of a significant counterparty, including a clearing organization, to perform its obligations under such transactions or other agreements could have an adverse effect on our financial condition and results of operations, as well as our ability to engage in routine derivative transactions. If we are unable to transact additional business with those counterparties, our ability to effectively use derivatives could be adversely affected, which could impair our ability to manage some aspects of our interest-rate risk.

Moreover, our ability to engage in routine derivatives, funding and other transactions could be adversely affected by the actions and commercial soundness of financial institutions that transact business with our counterparties. Financial services institutions are interrelated as a result of trading, clearing, counterparty and/or other relationships. Consequently, financial difficulties experienced by one or more financial services institutions could lead to market-wide disruptions that may impair our ability to find suitable counterparties for routine business transactions.

Providing Financial Support to Other FHLBanks Could Negatively Impact the Bank's Liquidity, Earnings and Capital and Our Members.

We are jointly and severally liable with the other FHLBanks for the consolidated obligations issued on behalf of the FHLBanks through the Office of Finance. If another FHLBank were to default on its obligation to pay principal and interest on any consolidated obligations, the Finance Agency may allocate the outstanding liability among one or more of the remaining FHLBanks on a pro-rata basis or on any other basis the Finance Agency may determine. In addition to possibly making payments due on consolidated obligations under our joint and several liability, we may voluntarily or involuntarily provide financial assistance to another FHLBank in order to resolve a condition of financial distress. Such assistance could negatively affect our financial condition, our results of operations and the value of membership in our Bank. Moreover, a Finance Agency regulation provides for each FHLBank to contribute at least 10% of its annual net earnings before interest expense on MRCS subject to an FHLBank System-wide annual minimum contribution to AHP of $100 million. As discussed in the first risk factor under *Business Risk - Legislative and Regulatory*, the Finance Agency's report on the System indicates that the Finance Agency plans to recommend that Congress consider amending the FHLBank Act to at least double the minimum required annual AHP contributions by the FHLBanks. If the required System-wide annual minimum contribution is increased or we become liable for a pro-rata share of any shortfall, our net earnings could be reduced or eliminated. Thus, these requirements could adversely affect our ability to pay dividends to our members or to redeem or repurchase capital stock.

Market Risk

Changes in Interest Rates or Changes in the Differences Between Short-Term Rates and Long-Term Rates Could Have an Adverse Effect on Our Earnings.

Our ability to prepare for changes in interest rates, or to hedge related exposures such as volatility or basis risk, significantly affects the success of our asset and liability management activities and our level of net interest income.

The effect of interest rate changes can be exacerbated by prepayment and extension risks, which are the risks that mortgage-based investments will be refinanced by borrowers in low interest-rate environments or will remain outstanding longer than expected at below-market yields when interest rates increase. Decreases in interest rates typically cause mortgage prepayments to increase, which may result in increased premium amortization expense and a decrease in the yield of our mortgage assets as we experience a return of principal that we must re-invest in a lower rate environment. While these prepayments would reduce the asset balance, our balance of consolidated obligations may remain outstanding. Conversely, increases in interest rates typically cause mortgage prepayments to decrease or mortgage cash flows to slow, possibly resulting in the debt funding the portfolio to mature and the replacement debt to be issued at a higher cost, thus reducing our interest spread.

A flattening or inverted yield curve, in which the difference between short-term interest rates and long-term interest rates is lower or negative, respectively, relative to prior market conditions, will tend to reduce, and has reduced, the net interest margin on new loans added to the MPP portfolio. Until such time as the yield curve becomes steeper, we may continue to earn lower spread income from that portfolio.

Liquidity Risk

The Inability to Access Capital Markets on Acceptable Terms Could Adversely Affect Our Liquidity, Operations, Financial Condition and Results of Operations, and the Value of Membership in Our Bank.

Our primary source of funds is the sale of consolidated obligations in the capital markets. Our ability to obtain funds through the sale of consolidated obligations depends in part on prevailing conditions in the capital markets, such as investor demand and liquidity, and on dealer commitment to inventory and support our debt. Any disruption in the debt market could have an adverse impact on our interest spreads, opportunities to call and reissue existing debt or roll over maturing debt, or our ability to satisfy the Finance Agency's liquidity requirements.

Operational Risk

A Cybersecurity Event; Interruption in Our Information Systems; Unavailability of, or an Interruption of Service at, Our Main Office or Our Backup Facilities; or Failure of or an Interruption in Information Systems of Third-Party Vendors or Service Providers Could Adversely Affect Our Business, Risk Management, Financial Condition, Results of Operations, and Reputation.

Cybersecurity. We rely heavily on our information systems and other technology to conduct and manage our business, which inherently involves large financial transactions with our members and other counterparties. Our operations rely on the secure processing, storage and transmission of confidential and other information, both in our and third parties' computer systems and networks, including those of backup service providers. These computer systems, software and networks are vulnerable to breaches, unauthorized access, damage, misuse, computer viruses or other malicious code and other events that could potentially jeopardize the confidentiality of such information or otherwise cause interruptions or malfunctions in our operations, either directly or through a third party. Similarly, work-from-home arrangements that we have used and that have been and are used by third party vendors present additional risks of cybersecurity events. We have not experienced a disruption in our information systems that has had a material adverse effect on us.

However, as malicious threat tactics continue to become more pervasive and more sophisticated, including via the use of increasingly powerful artificial intelligence tools, and as regulatory scrutiny of cybersecurity risk management increases, we are required to implement more advanced mitigating controls, which increases our costs. Moreover, if we experience a significant cybersecurity event, either directly or through a third party, we may suffer significant financial or data loss; be unable to conduct and manage our business functions effectively; incur significant expenses in remediating such incidents; and suffer reputational harm. Any such occurrence could result in increased regulatory scrutiny of our operations. There can be no assurance that our or any third parties' cybersecurity controls will timely detect or prevent all cybersecurity incidents. Although we carry cybersecurity insurance, its coverage may not be broad enough or adequate to cover losses we may incur if a significant cybersecurity event occurs.

Information Systems; Facilities; Unavailability or Interruption of Service. In addition, our operations rely on the availability and functioning of our main office, our business resumption center and other facilities. If we experience a significant failure or interruption in our business continuity, disaster recovery or certain information systems, we may be unable to conduct and manage our business functions effectively; incur significant expenses in remediating such incidents; and suffer reputational harm. Moreover, any of these occurrences could result in increased regulatory scrutiny of our operations.

Office of Finance. The Office of Finance is a joint office of the FHLBanks established to facilitate the issuance and servicing of consolidated obligations, among other activities. A failure or interruption of the Office of Finance's services as a result of breaches, cyber attacks, or technological outages (either in the Office of Finance or certain of its third party service providers, including those of backup service providers) could constrain or otherwise negatively affect our business operations, including disruptions to our access to funding through the sale of consolidated obligations. Moreover, any operational failure of the Office of Finance or of its third party providers could expose us to the risk of loss of data or confidential information, or other harm, including reputational damage.

Other Third Parties. Despite our policies, procedures, controls and initiatives, some operational risks are beyond our control, and the failure of other parties to adequately address their performance standards and operational risks could adversely affect us. In addition to internal computer systems, we outsource certain communication and information systems and other services critical to our business infrastructure, and regulatory compliance to third-party vendors and service providers, including derivatives clearing organizations, loan servicers, and the Federal Reserve as to funds transfers.

Compromised security or operational errors at any third party with whom we conduct business, or at any third party's contractors, could expose us to cyber attacks, other breaches or service failures or interruptions. If one or more of these external parties were not able to perform their functions for a period of time, at an acceptable service level, or with increased volumes, our business operations could be constrained, disrupted, or otherwise negatively affected. In addition, any failure, interruption or breach in security of these systems, any disruption of service, or any external party's failure to perform its contractual obligations could result in failures or interruptions in our ability to conduct and manage our business effectively, including, without limitation, our advances, MPP, funding, hedging activities and regulatory compliance. There is no assurance that such failures or interruptions will not occur or, if they do occur, that they will be timely detected or adequately addressed by us or the third parties on which we rely. Any failure, interruption, or breach could significantly harm our customer relations and business operations, which could negatively affect our financial condition, results of operations, or ability to pay dividends or redeem or repurchase capital stock.

A Failure of the Business and Financial Models and Related Processes Used to Evaluate Various Financial Risks and Derive Certain Estimates in Our Financial Statements Could Produce Unreliable Projections or Valuations, which Could Adversely Affect Our Business, Financial Condition, Results of Operations and Risk Management.

We are exposed to market, business and operational risk, in part due to the significant use of business and financial models when evaluating various financial risks and deriving certain estimates in our financial statements. Our business could be adversely affected if these models fail to produce reliable projections or valuations. These models, which rely on various inputs including, but not limited to, loan volumes and pricing, market conditions for our consolidated obligations, interest-rate spreads and prepayment speeds, implied volatility of options contracts, and cash flows on mortgage-related assets, require management to make critical judgments about the appropriate assumptions that are used in the determinations of such risks and estimates and may overstate or understate the value of certain financial instruments, future performance expectations, or our level of risk exposure. Our models could produce unreliable results for a number of reasons, including, but not limited to, invalid or incorrect assumptions underlying the models, the need for manual adjustments in response to rapid changes in economic conditions, incorrect coding of the models, incorrect data being used by the models or inappropriate application of a model to products or events outside the model's intended use. In particular, models can be less dependable when the economic environment is outside of historical experience, as has been the case in recent years. While we take steps to review and validate our models to minimize inaccuracies, there can be no assurance that all inaccuracies will be identified timely. The reliance on inaccurate models could result in unreliable projections or valuations, which could result in sub-optimal strategies and, in turn, adversely affect our business, financial condition, results of operations and risk management.

General Risks

Natural Disasters, Including those Resulting from Significant Climate Change, and Similar Catastrophic Events Could Adversely Affect Our Business and Our Members.

Regions in which we operate are subject to natural disasters, including risks from hurricanes, tornadoes, floods, wild fires, drought and other natural disasters. Climate change is increasing the frequency, intensity and duration of these weather events. Likewise, similar catastrophic events, such as epidemics or pandemics, acts of war or terrorism, and/or disruptions in the availability of critical infrastructure on which we rely due to a cyber incident or otherwise could occur. Any such natural disasters or similar catastrophic events could destroy or damage our assets or collateral that members have pledged to us; disrupt our business; increase the probability of power or other outages; negatively affect the livelihood of borrowers of our members; or otherwise cause significant economic dislocation in the affected regions. Any of these situations may adversely affect our financial condition and results of operations.

ITEM 1B. UNRESOLVED STAFF COMMENTS

None.

ITEM 1C. CYBERSECURITY

Cybersecurity Risk Management and Strategy

We are subject to the risk of a cybersecurity incident. A cybersecurity incident is an unauthorized occurrence, or a series of related unauthorized occurrences, through information systems that jeopardizes the confidentiality, integrity, or availability of our information systems or any information residing therein. Information systems are any electronic information resources, owned or used by us, including physical or virtual infrastructure controlled by such information resources, or their components, organized for the collection, processing, maintenance, use, sharing, dissemination, or disposition of information to maintain or support our operations. For additional information, see *Item 1A Risk Factors* for a description of cybersecurity incident risk.

We have a cybersecurity risk management framework for assessing, identifying, and managing material risks from cybersecurity incidents that is designed to protect the confidentiality, integrity, and availability of our information technology assets and data. Cybersecurity risk management is part of our enterprise risk management program. We have implemented processes for assessing, identifying, and managing material risks from cybersecurity incidents that may directly or indirectly impact our business strategy, results of operations, or financial condition. Those processes include the development, approval and implementation of our Enterprise Information Security Policy ("EISP"), Information Security Standards, Information Security Incident Response Plan ("ISIRP") and Business Continuity Management Policy.

The EISP is our core policy for assessing, identifying and managing cybersecurity risks, and it applies to all employees, contractors, temporary employees, and other parties doing business on behalf of or in support of the Bank who, by the nature of their work, have access to our information assets and systems. Broadly, it establishes the administrative, technical, and physical safeguards designed to protect the security, confidentiality, and integrity of Bank information in accordance with the applicable law. To do this, the EISP, among other provisions:

- allocates key responsibilities, including the responsibilities of our chief information security officer ("CISO") and our Chief Risk Officer ("CRO") related to cybersecurity risk management;
- establishes a security education, training and awareness program, which is intended to influence development of skills and habits to safeguard our information assets;
- establishes a risk-based vulnerability management program;
- mandates and establishes standards for periodic penetration testing;
- provides controls and minimum standards regarding physical security (e.g., systems are located behind locked doors) and operational security (e.g., monitoring existing and emerging threats);
- mandates the development, acquisition and maintenance of systems with appropriate security controls (e.g., maintaining appropriate configuration management and control processes and maintaining appropriate patch management processes); and
- mandates the adoption of industry standards to address business requirements within a cybersecurity framework that leverages both the National Institute of Standards and Technology framework and the Center for Information Security Controls in measuring the maturity of our information security program and its adoption of best practices.

Our Information Security Standards provide rules for the implementation of the EISP. These standards provide greater granularity on the Bank's requirements for the establishment, maintenance and continuous improvement of our information security program.

The ISIRP determines how information security incidents are identified, classified, and escalated, including for the purposes of reporting, and providing relevant information to the board of directors. The ISIRP also supports management's assessment of incident materiality.

The ISIRP also includes action plans for responding to third-party cybersecurity threats and incidents. We undertake due diligence of third-party systems with which we interact, in addition to requiring data protection covenants in the related third-party provider agreements, as appropriate. Our vendor management program includes ongoing monitoring and oversight of the third-party providers, including performance and information security reviews utilizing System and Organization Control reports, when available, and risk based re-assessment of high inherent-risk third-party providers on an annual basis. Any unsatisfactory reviews are escalated for consideration of appropriate steps to appropriately manage the related risk.

We leverage certain third-party providers to support our security event monitoring. In addition, certain third parties support our vendor security due diligence process. We may retain assessors, consultants, auditors, etc. to assist in the development/creation/monitoring of those processes for assessing, identifying, and managing cybersecurity incident risk.

Our business continuity program includes the maintenance of resources necessary to protect us from potential loss during a disruption, which includes the unavailability of information technology assets due to unintentional events like fire, power loss, and other technical incidents such as hardware failures. The business continuity program includes, among other items, business impact analysis for developing effective plans and a disaster recovery plan to respond, recover, resume, and restore technology assets critical for us to operate.

During the period covered by this report, we have not experienced any cybersecurity incidents that have had a material effect on our financial condition or results of operations. We assess the materiality of any cybersecurity incident from several perspectives including, but not limited to, our ability to continue to service our members and protect private information, lost revenue, disruption of business operation, increased operating costs, litigation, and reputational harm.

Cybersecurity Governance

Our board provides oversight of our risk management program, which includes cybersecurity risk management, via its Risk Oversight Committee. Among its responsibilities, the Risk Oversight Committee reviews and discusses, from a risk oversight point of view, reports on the Bank's current and emerging security risks, the metrics used to monitor security risks and management's views on the acceptable and appropriate levels of security risk. The Risk Oversight Committee also reviews and makes recommendations to the board regarding the approval of the EISP.

Our board's Security and Technology Committee ("STC") reviews the overall status of management's information security program, including any significant issues, significant emerging risks, strategies, and other information to ensure that information security management practices appropriately address potential risks. It is also responsible for the exposure and containment of technology risks, including security risks.

In addition, our board and/or the STC receives regular presentations and reports throughout the year on cybersecurity and information security risk. These presentations and reports address a broad range of topics, including updates on technology trends, regulatory developments, legal issues, policies and practices, information security resources and organization, the threat environment and vulnerability assessments, and specific and ongoing efforts to prevent, detect, and respond to internal and external incidents and critical threats. In addition, the CISO provides prompt and timely information on any cybersecurity or information security incident that may pose significant risk to us and continues to provide regular reports on any such incident until its conclusion.

Under the management and direction of the Chief Information Officer, the CISO is responsible for assessing and managing our material risks from cybersecurity threats. The CISO also has a dotted line reporting relationship to the CRO for purposes of informing the CRO on related risks. The cybersecurity risk management function under the CRO is responsible for identifying, assessing and evaluating cybersecurity risks and monitoring and tracking cybersecurity risk mitigation strategies.

The CISO leads an Information Security Steering Committee ("ISSC") which convenes expertise from areas beyond the information security and technology departments, including risk, legal and operations, or other departments, as necessary. Accordingly, the ISSC provides for an interdisciplinary expertise in the implementation of our cybersecurity risk management framework. The CISO reports on behalf of the ISSC to management's Risk Committee. These reports include information on topics such as threat intelligence, major cybersecurity risk areas, technologies and best practices, and any cybersecurity incidents.

The CISO and the CRO are informed about and monitor the prevention, detection, mitigation and remediation of cybersecurity incidents with the support of our information security department.

Our information security department, which is led by the CISO, is comprised of specialized professionals who are responsible for the day-to-day, hands-on management of the cybersecurity risk and who handle the processes and procedures to mitigate and implement protective, proactive and reactive measures to protect us against those risks. The department is responsible for developing, documenting, and approving our technical information security control standards, guidelines, and procedures designed to preserve the confidentiality, integrity, and availability of our information technology assets and data.

Our CISO holds a degree in information systems design and analysis and advanced degrees in telecommunications and information technology management. He has over 24 years of experience leading Information Security teams and over a decade as a senior leader within Information Security.

For additional information, see *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Management*.

ITEM 2. PROPERTIES

We own an office building containing approximately 117,000 square feet of office and storage space at 8250 Woodfield Crossing Boulevard, Indianapolis, IN, of which we lease 5,000 square feet to a single tenant. In addition, we lease office space in Detroit, MI, which is used for community and member engagement, and in Anderson, IN, which is used for business resumption activities in the event of a loss of or a disruption to the primary facility.

We also maintain two geographically dispersed, co-located data centers which are on electrical distribution grids that are separate from each other and from our office buildings. For more information, see *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Management - Operational Risk Management*.

In the opinion of management, our physical properties are suitable and adequate. All of our properties are insured to approximately replacement cost.

ITEM 3. LEGAL PROCEEDINGS

In the ordinary course of business, we may from time to time become a party to lawsuits involving various business matters. We are unaware of any lawsuits presently pending which, individually or in the aggregate, could have a material effect on our financial condition or results of operations.

ITEM 4. MINE SAFETY DISCLOSURES

None.

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

We use acronyms and terms throughout this Item that are defined herein or in the *Defined Terms.*

No Trading Market

Our capital stock is not publicly traded, and there is no established market for such stock. Members may be required to purchase additional shares of stock from time to time to meet minimum stock purchase requirements under our capital plan.

Our Class B stock is registered under the Exchange Act and may be purchased, sold, redeemed and repurchased only at par. Because our shares of capital stock are "exempt securities" under the Securities Act, purchases and sales of stock by our members are not subject to registration under the Securities Act.

Depending on the class of capital stock, it may be redeemed either six months (Class A Common Stock) or five years (Class B Common Stock) after we receive a written request by a member, subject to regulatory limits and to the satisfaction of any ongoing stock investment requirements applying to the member under our capital plan. We may repurchase shares held by members in excess of their required holdings at our discretion at any time in accordance with our capital plan.

Capital Structure

Our capital plan provides for two sub-series of Class B capital stock: Class B-1 and Class B-2. Class B-1 stock is held by our members to satisfy their membership stock requirements, while Class B-2 stock is held to satisfy members' activity-based stock requirements. Class B-1 stock is automatically reclassified as Class B-2 as needed to help fulfill a member's activity-based stock requirement and before the member is required to purchase additional Class B-2 stock to fully meet its capital stock requirement. Excess Class B-2 stock is automatically reclassified as Class B-1.

Under our capital plan, PFIs may opt in to an activity-based stock requirement in connection with their sales of mortgage loans to us under Advantage MPP. PFIs may elect this stock requirement each time they enter into an MCC with us based on the outstanding principal balance of loans purchased. As of December 31, 2023, such Class B-2 stock issued and outstanding totaled $111 million.

Our capital plan also permits the board of directors to authorize the issuance of Class A stock. Under the plan, Class A stock may be used at the member's election, in lieu of Class B-2 stock, to satisfy the member's activity-based stock requirement. Class A stock is subject to the same redemption requirements and limitations as Class B stock, except the applicable redemption period for Class A stock is six months. As of December 31, 2023, the board of directors had not authorized the issuance of Class A stock.

Number of Shareholders

As of February 29, 2024, we had 366 shareholders and $2.7 billion par value of regulatory capital stock, which includes Class B stock and MRCS issued and outstanding. We had no Class A stock outstanding.

Dividends

We may, but are not required to, pay dividends on our capital stock. Dividends are authorized by our board of directors and subject to Finance Agency regulations. Dividends are non-cumulative and may be paid in cash or capital stock out of current net earnings, or from unrestricted retained earnings, or from restricted retained earnings after that balance exceeds 1.5% of the average balance of our outstanding consolidated obligations for the quarter. No dividend may be declared or paid if we are or would be, as a result of such payment, in violation of our minimum capital requirements. Moreover, we may not pay dividends if any principal or interest due on any consolidated obligation issued on behalf of any of the FHLBanks has not been paid in full or, under certain circumstances, if we fail to satisfy liquidity requirements under applicable Finance Agency regulations.

Under Finance Agency regulations, stock dividends cannot be paid if our excess stock is greater than 1% of our total assets. At December 31, 2023, our excess stock was 1.01% of our total assets.

Under our capital plan, the board of directors may declare a dividend rate on Class B-2 stock that equals or exceeds the rate on Class B-1 stock. Similarly, the board of directors may declare a dividend rate on Class A stock that equals or exceeds the rate on Class B-1 stock.

The amount of the dividend to be paid is based on the average number of shares of each sub-series held by a member during the dividend payment period (applicable quarter).

For more information, see *Notes to Financial Statements - Note 12 - Capital* and *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Capital Resources*.

ITEM 6. [Reserved]

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

Presentation

This discussion and analysis by management of the Bank's financial condition and results of operations should be read in conjunction with the *Financial Statements* and related *Notes to Financial Statements* contained in this Form 10-K.

As used in this Item, unless the context otherwise requires, the terms "we," "us," "our" and "Bank" refer to the Federal Home Loan Bank of Indianapolis or its management. Acronyms and terms used throughout this Item are defined herein or in the *Defined Terms*.

Unless otherwise stated, amounts disclosed in this Item are rounded to the nearest million; therefore, dollar amounts of less than one million may not be reflected or, due to rounding, may not appear to agree to the amounts presented in thousands in the *Financial Statements* and related *Notes to Financial Statements*. Amounts used to calculate dollar and percentage changes are based on numbers in the thousands. Accordingly, calculations based upon the disclosed amounts (millions) may not produce the same results.

Executive Summary

Overview. As an FHLBank, we are a regional wholesale bank that serves as a financial intermediary between the capital markets and our members. The Bank is structured as a financial cooperative, which allows our business to be scalable and self-capitalizing without taking undue risks, diminishing capital adequacy or jeopardizing profitability. Therefore, the Bank is generally designed to expand and contract in asset size as the needs of our members and their communities change.

We primarily make secured loans in the form of advances to our members and purchase whole mortgage loans from our members. Additionally, we purchase other investments and provide other financial services to our members.

Our principal source of funding is the proceeds from the sale to the public of FHLBank debt instruments, called consolidated obligations, which are the joint and several obligation of all FHLBanks. We obtain additional funds from deposits, other borrowings, and by issuing capital stock to our members.

Our primary source of revenue is interest earned on advances, mortgage loans, and investments, including MBS.

Our net interest income is primarily determined by the size of our balance sheet and the spread between the interest rate earned on our assets and the interest rate paid on our share of the consolidated obligations. A substantial portion of net interest income may also be derived from deploying our capital which has no associated interest cost, i.e., interest-free capital. We use funding and hedging strategies to manage the related interest-rate risk.

Due to our cooperative ownership structure and wholesale nature, we typically earn a narrow interest spread. Accordingly, our net income is relatively low compared to our total assets and capital.

In addition, as a cooperative, some members utilize our products more heavily and own more capital stock than others. As a result, we must achieve a balance in generating membership value from rates we charge on advances or prices we pay to purchase mortgage loans and paying a competitive dividend rate.

We group our products and services within two operating segments: *traditional* and *mortgage loans*.

For more background information on the Bank, see *Item 1. Business.*

Business Environment. The Bank's financial performance is influenced by several key national economic and market factors, including fiscal and monetary policies, the conditions in the housing markets and the level and volatility of market interest rates.

Economy and Financial Markets. The strength and resilience of the U.S. economy continued to defy expectations in the fourth quarter as U.S. real gross domestic product, according to the U.S. Commerce Department, grew at a seasonally- and inflation-adjusted annual rate of 3.3%. The quarterly reading was a decline from the third quarter’s rate of 4.9% but better than the 2% economists expected.

Much of the credit for the better-than-expected growth in 2023 was attributed to consumer spending, which grew at an annual rate of 2.8% in the fourth quarter. Boosted by a tight but moderating labor market, leftover savings accumulated during the pandemic, and higher wages, U.S. consumers continued to demonstrate a willingness to spend freely throughout 2023 despite high interest rates and price levels.

The labor market produced steady job gains in 2023 as unemployment rates remained near historic lows. The U.S. unemployment rate in December, according to the U.S. Bureau of Labor Statistics, held at a low 3.7%. Not adjusting for inflation, average hourly wages were up 4.1% in December from a year earlier, according to the U.S. Labor Department. While still outpacing inflation, hourly wage growth cooled compared to December 2022, when it rose 4.8%.

Inflation continued to moderate in the fourth quarter and has eased sharply from its recent peak in June 2022. The personal-consumption expenditures price index, the Federal Reserve's preferred inflation gauge, rose in 2023 at an annual rate of 2.6%, according to the Commerce Department, down from September’s annual rate of 3.4% and down significantly from a four-decade high annual rate of 7% in June 2022. The associated measure of core prices, which excludes volatile food and energy prices, rose 2.9% compared to a year earlier, the smallest year-over-year increase since March 2021. Using three- and six-month annualized rates, core inflation was 1.5% and 1.9%, respectively, in December, below the Federal Reserve’s inflation target of 2%.

The combination of slowing price increases and a resilient economy continue to spark hopes that the economy will experience a soft landing, where inflation ebbs without causing a recession. While the economic growth and reduction in inflation exceeded expectations in 2023, signs of a slowing economy and sources of economic stress are emerging. A primary concern centers on how long consumers can continue spending at current levels as savings dwindle, high-interest debt accrues and student loan payments resume. In addition, stalled business development, the ongoing geopolitical instability, the possibility of a government shutdown and the upcoming presidential election are all potential factors that could have an adverse impact on the economy in 2024.

Conditions in U.S. Housing Markets. The actions by the Federal Reserve to curb inflation by raising interest rates have most directly affected consumers through the housing market. In 2023, home sales dropped to the lowest level in nearly three decades as elevated mortgage interest rates kept many buyers out of the market due to a lack of affordability, which reduced housing demand. At the same time, high mortgage rates discouraged homeowners from selling as many were reluctant to give up their existing low mortgage rates, reducing the available inventory of homes for sale.

The result of lower demand and lower supply was declining existing-home sales and stubbornly high prices. Existing-home sales, which comprise most of the housing market, fell 19% in 2023 from the prior year, according to the National Association of Realtors ("NAR"). Total existing-home sales in 2023 were lower than during the subprime crisis and the lowest full year-level since 1995. The national median existing-home price rose 4.4% in December from a year earlier to $382,000.

However, after reaching its highest level in 22 years in late October, the average rate on a 30-year fixed-rate mortgage declined for nine consecutive weeks to close 2023 at an average rate of 6.61%, a decline of 1.18 percentage points over that span and the lowest level since May 2023, according to Freddie Mac. As mortgage rates declined, the housing market began to show some signs of life in early 2024 and it’s possible 2023 represented a bottom for sales activity.

Housing affordability, particularly for first-time home buyers, remains an economic burden. The NAR affordability index reached its worst level in August since 1985 and remains well below historic norms.

Interest Rate Levels and Volatility. The Federal Reserve seeks to achieve maximum employment and inflation at the rate of 2% over the longer run. In support of these goals, at its meeting on December 13, 2023, the FOMC decided to maintain the target range at 5.25% to 5.50%, indicating tighter financial and credit conditions for households and businesses are likely to continue weighing on economic activity, hiring, and inflation, while the extent of these effects remains uncertain.

The following table presents certain key interest rates.

	Average for Twelve-Months Ended December 31,		Period End December 31,	
	2023	2022	2023	2022
Federal Funds Effective	5.03 %	1.68 %	5.33 %	4.33 %
SOFR	5.01 %	1.64 %	5.38 %	4.30 %
1-week Overnight-Indexed Swap	5.05 %	1.76 %	5.33 %	4.34 %
3-month U.S. Treasury yield	5.19 %	2.04 %	5.34 %	4.37 %
2-year U.S Treasury yield	4.60 %	2.99 %	4.25 %	4.43 %
10-year U.S. Treasury yield	3.96 %	2.95 %	3.88 %	3.88 %

Source: Bloomberg

The level and volatility of interest rates, including the shape of the yield curve, were affected by several factors, principally efforts by the Federal Reserve beginning in late March 2022 to raise interest rates and tighten monetary policy to combat high inflation.

As the FOMC raised short-term rates, portions of the Treasury yield curve became inverted. The 2-year rate was consistently higher than the 10-year rate. Investors use the 10-year Treasury yield as an indicator of investor confidence. With the rise in the 10-year rate in 2023, the yield curve became less inverted. The rate peaked above 5% in late October, but dropped over 100 basis points throughout the remainder of 2023, the largest two-month decline since the global financial crisis in 2008.

At its meeting on January 31, 2024, despite recent indicators suggesting economic activity has been expanding at a solid pace and inflation is easing, the FOMC decided to maintain the target range for the federal funds rate at 5.25% to 5.50%.

The FOMC stated that "In considering any adjustments to the target range for the federal funds rate, the Committee will carefully assess incoming data, the evolving outlook, and the balance of risks. The Committee does not expect it will be appropriate to reduce the target range until it has gained greater confidence that inflation is moving sustainably toward 2 percent. The Committee remains highly attentive to inflation risks and seeks to achieve maximum employment and inflation at the rate of 2 percent over the longer run."

"In assessing the appropriate stance of monetary policy, the Committee will continue to monitor the implications of incoming information for the economic outlook. The Committee would be prepared to adjust the stance of monetary policy as appropriate if risks emerge that could impede the attainment of the Committee's goals."

"In addition, the Committee will continue reducing its holdings of Treasury securities and agency debt and agency MBS, as described in its previously announced plans."

Impact on Operating Results. Lending and investing activity by our member institutions is a key driver for our balance sheet and income growth. Such activity is a function of both prevailing interest rates and economic activity, including local economic factors, particularly relating to the housing and mortgage markets. Positive economic trends tend to increase demand by our members for advances to support their funding needs but can drive market interest rates higher, which can impair activity in the mortgage market. A less active mortgage market can affect demand for advances and activity levels in our Advantage MPP. However, member demand for liquidity, particularly during stressed market conditions, can also lead to advances growth. Borrowing patterns between our insurance company and depository members can differ during various economic and market conditions, thereby easing the potential magnitude of core business fluctuations during business cycles.

The level and trends of market interest rates and the shape of the U.S. Treasury yield curve affect our yields and margins on earning assets, including advances, purchased mortgage loans, and our investment portfolio, which contribute to our overall profitability. Additionally, trends in market interest rates drive mortgage origination and prepayment activity, which can lead to net interest margin volatility in our MPP and MBS portfolios. A flat or inverted yield curve, in which the difference between short-term interest rates and long-term interest rates is low, or negative, respectively, may have an unfavorable impact on our net interest margins. A steep yield curve, in which the difference between short-term and long-term interest rates is high, may have a favorable impact on our net interest margins. The level of interest rates also directly affects our earnings on assets funded by our interest-free capital.

Results of Operations and Changes in Financial Condition

Results of Operations for the Years Ended December 31, 2023 and 2022. The following table presents the comparative highlights of our results of operations ($ amounts in millions).

Condensed Statements of Comprehensive Income	Years Ended December 31, 2023	2022	$ Change	% Change
Net interest income	$ 495	$ 291	$ 204	70 %
Provision for (reversal of) credit losses	—	—	—	
Net interest income after reversal of credit losses	495	291	204	70 %
Other income	46	19	27	
Other expenses	120	113	7	
Income before assessments	421	197	224	114 %
AHP assessments	44	20	24	
Net income	377	177	200	114 %
Total OCI (loss)	(48)	(159)	111	
Total comprehensive income	$ 329	$ 18	$ 311	1,742 %

Net income for the year ended December 31, 2023 was $377 million, an increase of $200 million compared to the prior year. The increase was substantially due to higher earnings on the portion of the Bank's assets funded by its capital, driven substantially by the increase in market interest rates, and an increase in the average balances outstanding of interest-earning assets, primarily advances. Average advances outstanding increased by $6.2 billion, or 21%.

Total OCI (loss) for the year ended December 31, 2023 was $(48) million, compared to $(159) million in the prior year. The decrease was substantially due to lower unrealized losses on AFS securities.

The following table presents the returns on average assets and returns on average equity.

Ratios	Years Ended December 31, 2023	2022
Return on average assets	0.53 %	0.28 %
Return on average equity	10.57 %	5.03 %

Results of Operations for the Years Ended December 31, 2022 and 2021. A comparison of our results of operations for the years ended December 31, 2022 and 2021 is contained in the corresponding Item 7 in our 2022 Form 10-K, filed with the SEC on March 15, 2023.

Changes in Financial Condition for the Year Ended December 31, 2023. The following table presents the comparative highlights of our changes in financial condition ($ amounts in millions).

Condensed Statements of Condition	**December 31, 2023**	**December 31, 2022**	**$ Change**	**% Change**
Advances	$ 35,562	$ 36,683	$ (1,121)	(3)%
Mortgage loans held for portfolio, net	8,614	7,687	927	12 %
Liquidity investments [1]	12,152	10,805	1,347	12 %
Other investment securities [2]	19,451	16,420	3,031	18 %
Other assets	829	689	140	20 %
Total assets	$ 76,608	$ 72,284	$ 4,324	6 %
Consolidated obligations	$ 71,053	$ 67,270	$ 3,783	6 %
MRCS	369	373	(4)	(1)%
Other liabilities	1,442	1,257	185	15 %
Total liabilities	72,864	68,900	3,964	6 %
Capital stock	2,285	2,123	162	8 %
Retained earnings [3]	1,532	1,287	245	19 %
AOCI (loss)	(73)	(26)	(47)	(185)%
Total capital	3,744	3,384	360	11 %
Total liabilities and capital	$ 76,608	$ 72,284	$ 4,324	6 %
Total regulatory capital [4]	$ 4,186	$ 3,783	$ 403	11 %

(1) Includes cash, interest-bearing deposits, securities purchased under agreements to resell, federal funds sold and U.S. Treasury obligations classified as trading securities.
(2) Includes AFS and HTM securities.
(3) Includes restricted retained earnings at December 31, 2023 and 2022 of $398 million and $323 million, respectively.
(4) Total capital less AOCI plus MRCS.

Total assets at December 31, 2023 were $76.6 billion, a net increase of $4.3 billion, or 6%, from December 31, 2022, primarily due to purchases of investments.

Advances outstanding at December 31, 2023, at carrying value, totaled $35.6 billion, a net decrease of $1.1 billion, or 3%, from December 31, 2022. The par value of advances outstanding decreased by 4% to $35.9 billion, which included a net decrease in short-term advances of 33% and a net increase in long-term advances of 15%. At December 31, 2023, long-term advances composed 73% of advances outstanding, while short-term advances composed 27%. The par value of advances outstanding to depository institutions — comprising commercial banks, savings institutions and credit unions — decreased by 6%, while advances outstanding to insurance companies increased by 1%.

Mortgage loans held for portfolio at December 31, 2023 totaled $8.6 billion, a net increase of $927 million, or 12%, from December 31, 2022, as the Bank's purchases exceeded principal repayments by borrowers. Purchases of mortgage loans from the Bank's members for the year ended December 31, 2023 totaled $1.6 billion.

Liquidity investments at December 31, 2023 totaled $12.2 billion, a net increase of $1.3 billion, or 12%, from December 31, 2022. The portion of U.S. Treasury obligations classified as trading securities decreased by $1.6 billion, or 73%, to $600 million, as substantially all of the Bank's purchases of U.S. Treasury obligations in 2023 were classified as available-for-sale. Cash and short-term investments increased by $3.0 billion, or 35%, to $11.6 billion. As a result of this activity, cash and short-term investments represented 95% of the total liquidity investments at December 31, 2023, while U.S. Treasury obligations represented 5%.

Other investment securities, which consist substantially of MBS and U.S. Treasury obligations classified as HTM or AFS, at December 31, 2023 totaled $19.5 billion, a net increase of $3.0 billion, or 18%, from December 31, 2022, due to purchases of U.S. Treasury obligations and MBS to continue to support the Bank's financial position.

The Bank's consolidated obligations outstanding at December 31, 2023 totaled $71.1 billion, a net increase of $3.8 billion, or 6%, from December 31, 2022, which reflected higher funding needs associated with the net increase in the Bank's total assets.

Total capital at December 31, 2023 was $3.7 billion, a net increase of $360 million, or 11%, from December 31, 2022. The net increase primarily resulted from the growth of retained earnings and issuances of capital stock to support advance activity, partially offset by the Bank's voluntary repurchases of its members' excess stock during the third quarter.

The Bank's regulatory capital-to-assets ratio at December 31, 2023 was 5.46%, which exceeds all applicable regulatory capital requirements.

Outlook. We believe that our financial performance will continue to provide sufficient, risk-adjusted returns for our members across a wide range of business, financial, and economic environments.

During 2023, demand by our members for advances was strong, primarily due to our depository members' loan growth, the continued rise in market interest rates which increased their customers’ sensitivity to credited deposit rates and adversely impacted members’ investment portfolios, and the availability of suitable products to assist our members in managing their balance sheets in the uncertain economic environment. We expect these factors to continue to favorably impact demand for advances, resulting in a slight increase in advances outstanding in 2024.

Despite higher mortgage interest rates, we expect our mortgage loan balance outstanding to moderately increase in 2024 due to continuing strong demand by our members to participate in our Advantage MPP and low levels of prepayments expected on the loans in our existing portfolio.

We expect to continue to maintain relatively high levels of liquid investments to be able to timely and reliably support our members' needs. We also expect to continue purchasing U.S. Treasury obligations and we continue to seek to maintain investments in Agency MBS up to 300% of total regulatory capital.

Access to debt markets has been reliable, while the cost of our consolidated obligations increased significantly in 2023. Going forward, we expect the cost to continue to increase, with the extent of the increase dependent upon several factors, including the level of market interest rates, scheduled maturities of our existing lower-cost debt, competition from other issuers of Agency debt, changes in the investment preferences of potential buyers of Agency debt securities, global demand, pricing in the interest-rate swap market, and other technical market factors.

Despite the expected increase in funding costs, our overall interest spreads are expected to slightly increase in 2024 as the rise in market interest rates has driven asset yields higher and resulted in higher earnings on the portion of our assets funded by our interest-free capital.

We will continue to engage in various hedging strategies and use derivatives to assist in mitigating the volatility of earnings that arises from the maturity structure of our financial assets and liabilities. Although derivatives are used to mitigate market risk, they also introduce the potential for short-term earnings volatility, in part due to basis risk.

Considering our inherent relatively low margins as a wholesale institution and a cooperative, we continue to strive to keep our operating expense ratios relatively low. However, in 2024, we must absorb significant cost increases to continue to invest in technology to enhance our operating systems and member service capabilities. As a result, we expect a meaningful increase in our operating expenses in 2024.

In addition, we have committed to allocate voluntary funding to our AHP and various affordable housing, small business and community investment programs in 2024 of 5% of our net earnings for 2023. However, the timing of the recognition of such allocations as expense may vary due to applicable accounting requirements.

As a result of all of the foregoing factors, we have forecasted net income in 2024 to be slightly lower than net income in 2023.

Our board of directors seeks to reward our members with a sufficient, risk-adjusted return on their investment, particularly those who actively utilize our products and services. On February 22, 2024, our board of directors declared a cash dividend on Class B-2 activity-based stock at an annualized rate of 9.0% and on Class B-1 non-activity-based stock at an annualized rate of 4.0%, resulting in a spread between the rates of 5.0 percentage points. The overall weighted-average annualized rate paid was 7.41%. While the overall dividend rate in 2024 will depend on many factors, we expect the board to continue to declare a competitive dividend and maintain a meaningful spread between the rates on activity-based stock and non-activity-based stock.

The ultimate effects of economic and financial markets activity, including fiscal and monetary policies, the conditions in the housing markets and the level and volatility of market interest rates, as well as legislative and regulatory actions, continue to evolve and are highly uncertain and, therefore, the future impact on our business is difficult to predict.

Analysis of Results of Operations for the Years Ended December 31, 2023 and 2022.

Interest Income. Interest income on advances, mortgage loans held for portfolio, and investment securities is our primary source of revenue. Interest income for the year ended December 31, 2023 totaled \$3.8 billion, an increase of \$2.4 billion compared to the prior year, primarily driven by an increase in yields resulting from the increase in market interest rates and an increase in the average balances outstanding of interest-earning assets, primarily advances.

Interest Expense. Interest expense on consolidated obligations is our primary expense. Interest expense for the year ended December 31, 2023 totaled \$3.3 billion, an increase of \$2.2 billion compared to the prior year, primarily driven by an increase in our cost of funds resulting from the increase in market interest rates and an increase in the average balances outstanding of interest-bearing liabilities, substantially consolidated obligations.

Net Interest Income. As a result, net interest income is our primary source of earnings. The increase in net interest income for the year ended December 31, 2023 compared to the prior year was substantially due to higher earnings on the portion of the Bank's assets funded by its capital, driven substantially by the increase in market interest rates, and an increase in the average balances outstanding of interest-earning assets, primarily advances.

For the hedging relationships that qualified for hedge accounting, the differences between the changes in fair value of the hedged item and the associated derivatives (i.e. hedge ineffectiveness) are recorded in net interest income and resulted in net hedging gains for the year ended December 31, 2023 of \$18 million, compared to net hedging gains for the prior year of \$3 million.

Our net gains (losses) on derivatives fluctuate due to volatility in the overall interest-rate environment as we hedge our asset or liability risk exposures. In general, we hold derivatives and associated hedged items to the maturity, call, or put date. Therefore, due to timing, nearly all of the cumulative net gains and losses for these financial instruments will generally reverse over the remaining contractual terms of the hedged item. However, there may be instances when we terminate these instruments prior to the maturity, call or put date, which may result in a realized gain or loss. For more information, see *Notes to Financial Statements - Note 8 - Derivatives and Hedging Activities*.

The following table presents average daily balances, interest income/expense, and average yields/cost of funds of our major categories of interest-earning assets and their funding sources ($ amounts in millions).

	Years Ended December 31,								
	2023			2022			2021		
	Average Balance	Interest Income/ Expense [1]	Average Yield/ Cost of Funds [1]	Average Balance	Interest Income/ Expense [1]	Average Yield/ Cost of Funds [1]	Average Balance	Interest Income/ Expense [1]	Average Yield/ Cost of Funds [1]
Assets:									
Securities purchased under agreements to resell	$ 2,363	$ 119	5.02 %	$ 3,181	$ 54	1.68 %	$ 3,271	$ 2	0.05 %
Federal funds sold	4,702	240	5.11 %	4,019	78	1.94 %	3,755	3	0.08 %
MBS [2] [3]	11,393	670	5.88 %	10,055	245	2.44 %	10,917	112	1.03 %
Other investment securities [2] [3]	7,602	405	5.33 %	8,064	135	1.67 %	8,347	68	0.81 %
Advances [3]	36,113	1,943	5.38 %	29,939	634	2.12 %	28,609	115	0.40 %
Mortgage loans held for portfolio [3][4]	8,015	254	3.17 %	7,685	207	2.69 %	7,852	169	2.15 %
Other assets (interest-earning) [5]	2,495	124	4.97 %	1,733	38	2.16 %	734	1	0.07 %
Total interest-earning assets	72,683	3,755	5.17 %	64,676	1,391	2.15 %	63,485	470	0.74 %
Other assets, net [6]	(955)			(567)			612		
Total assets	$ 71,728			$ 64,109			$ 64,097		
Liabilities and Capital:									
Interest-bearing deposits	$ 777	38	4.85 %	$ 1,029	12	1.17 %	$ 1,609	—	0.01 %
Discount notes	20,213	1,001	4.95 %	19,320	374	1.93 %	15,012	9	0.06 %
CO bonds [3]	46,042	2,204	4.79 %	39,578	712	1.80 %	43,033	206	0.48 %
MRCS	371	17	4.73 %	73	2	2.92 %	174	3	1.49 %
Other borrowings	4	—	4.87 %	—	—	2.96 %	—	—	— %
Total interest-bearing liabilities	67,407	3,260	4.84 %	60,000	1,100	1.83 %	59,828	218	0.36 %
Other liabilities	751			594			708		
Capital stock	2,290			2,230			2,228		
All other components of capital	1,280			1,285			1,333		
Total liabilities and capital	$ 71,728			$ 64,109			$ 64,097		
Net interest income		$ 495			$ 291			$ 252	
Net spread on interest-earning assets less interest-bearing liabilities			0.33 %			0.32 %			0.38 %
Net interest margin [7]			0.68 %			0.45 %			0.40 %
Average interest-earning assets to interest-bearing liabilities	1.08			1.08			1.06		

(1) Includes hedging gains (losses) on qualifying fair-value hedging relationships. Excludes impact of purchase discount (premium) recorded through mark-to-market gains (losses) on trading securities and net interest settlements on derivatives hedging trading securities.

(2) The average balances of AFS securities are based on amortized cost; therefore, the resulting yields do not reflect changes in the estimated fair value that are a component of OCI.

(3) Except for AFS securities, interest income/expense and average yield/cost of funds include all components of interest, including the impact of net interest payments or receipts on derivatives in qualifying hedge relationships, amortization of hedge accounting basis adjustments, and prepayment fees on advances. Excludes net interest payments or receipts on derivatives in economic hedging relationships, including those hedging trading securities.

(4) Includes non-accrual loans.

(5) Consists of interest-bearing deposits and loans to other FHLBanks (if applicable). Includes the rights or obligations to cash collateral, except for variation margin payments characterized as daily settled contracts.

(6) Includes cumulative changes in the estimated fair value of AFS securities and grantor trust assets.

(7) Net interest income expressed as a percentage of the average balance of interest-earning assets.

Changes in both volume and interest rates determine changes in net interest income and net interest margin. Changes in interest income and interest expense that are not identifiable as either volume-related or rate-related, but are attributable to both volume and rate changes, have been allocated to the volume and rate categories based upon the proportion of the volume and rate changes. The following table presents the changes in interest income and interest expense by volume and rate ($ amounts in millions).

	Year Ended December 31, 2023 vs. 2022		
Components	**Volume**	**Rate**	**Total**
Increase (decrease) in interest income:			
Securities purchased under agreements to resell	$ (17)	$ 82	$ 65
Federal funds sold	15	147	162
MBS	37	388	425
Other investment securities	60	210	270
Advances	155	1,154	1,309
Mortgage loans held for portfolio	9	38	47
Other assets (interest-earning)	21	65	86
Total	280	2,084	2,364
Increase (decrease) in interest expense:			
Interest-bearing deposits	(3)	29	26
Discount notes	18	609	627
CO bonds	134	1,358	1,492
MRCS	13	2	15
Other borrowings	—	—	—
Total	162	1,998	2,160
Increase in net interest income	$ 118	$ 86	$ 204

Average Balances. The average balances outstanding of interest-earning assets for the year ended December 31, 2023 increased by 12% compared to the prior year. The average balances of advances outstanding increased by 21%, reflecting higher member utilization of advances. The average balances outstanding of interest-bearing liabilities for the year ended December 31, 2023 increased by 12% compared to the prior year. The average balances of CO bonds outstanding increased by 16% while the average balances of discount notes outstanding increased by 5%, reflecting a change in mix of funding. As a result, the average balances of total interest-earning assets, net of interest-bearing liabilities, increased by 13%. Such net increase contributed to the increase in interest income on the portion of the Bank's assets funded by its interest-free capital.

Yields/Cost of Funds. The average yield on total interest-earning assets for the year ended December 31, 2023, including the impact of net hedging gains/losses but excluding certain impacts of trading securities, was 5.17%, an increase of 302 bps compared to 2022, resulting primarily from increases in market interest rates that led to higher yields on all of our interest-earning assets. Such increase contributed to the increase in interest income on the portion of the Bank's assets funded by its interest-free capital. The average cost of funds of total interest-bearing liabilities for the year ended December 31, 2023, including the impact of net hedging gains/losses but excluding certain impacts of trading securities, was 4.84%, an increase of 301 bps due to higher funding costs on all of our interest-bearing liabilities. The net effect was an increase in the net interest spread of 1 bp to 0.33% for the year ended December 31, 2023 from 0.32% for the year ended December 31, 2022.

Other Income. The following table presents a comparison of the components of other income ($ amounts in millions).

Components	Years Ended December 31, 2023	2022
Net realized losses from sales of AFS and HTM securities	$ (7)	(1)
Net unrealized gains (losses) on trading securities [1]	25	(1)
Net realized gains (losses) on trading securities [2]	(5)	(22)
Net gains (losses) on trading securities	20	(23)
Net gains (losses) on derivatives hedging trading securities	(24)	19
Net gains (losses) on other derivatives not designated as hedging instruments [3]	4	(4)
Net interest settlements on economic derivatives [4]	20	33
Net gains on derivatives	—	48
Net gains on extinguishment of debt	20	—
Change in fair value of investments indirectly funding the liabilities under the SERP	7	(8)
Other, net	6	3
Total other income	$ 46	$ 19

(1) Includes impact of purchase discount (premium) recorded through mark-to-market gains (losses). Excludes impact of associated derivatives.

(2) Includes, at maturity, 100% of original discount (premium) as gain (loss). Excludes impact of associated derivatives.

(3) Includes swap termination fees received (paid) associated with sales of AFS securities.

(4) Generally offsetting interest income on trading securities or interest expense on the associated funding is included in net interest income.

The increase in total other income for the year ended December 31, 2023 compared to the prior year was primarily due to net gains on debt extinguishments and increases in the fair values of the investments indirectly funding the liabilities under the SERP.

In the first quarter of 2023, we retired two CO bonds prior to their contractual maturity dates and recognized net gains on debt extinguishment of $20 million. Such significant gain is not expected to be a recurring component of other income or net income.

Net Gains (Losses) on Trading Securities. We purchase fixed-rate U.S. Treasury obligations to enhance our liquidity. The shorter-term securities are classified as trading securities and are recorded at fair value, with changes in fair value reported in other income. Such changes include the impact of purchase discount (premium) recorded through mark-to-market gains (losses) on these securities. There are a number of factors that affect the fair value of these securities, including changes in interest rates, the passage of time, and volatility. These trading securities are economically hedged, so that over time the gains (losses) on these securities will be generally offset by the change in fair value of the associated derivatives, except for any purchase discount/premium.

Other Expenses. The following table presents a comparison of the components of other expenses ($ amounts in millions).

	Years Ended December 31,	
Components	**2023**	**2022**
Compensation and benefits	$ 65	$ 59
Other operating expenses	34	31
Finance Agency and Office of Finance	12	12
Voluntary allocations to AHP and/or related programs	4	6
Other	5	5
Total other expenses	$ 120	$ 113

The increase in total other expenses for the year ended December 31, 2023 compared to the prior year was due primarily to an increase in compensation and benefits. Such increase was primarily due to (i) net increases in compensation due to headcount, inflation, and conditions in the labor market, (ii) an increase in post-retirement benefits resulting from changes in market conditions, the impact of which was fully offset by a corresponding change in fair value recorded in other income, and (iii) excise tax refunds received in 2022 that were not received in 2023. These increases were partially offset by lower voluntary contributions to our DB plan.

Each FHLBank is assessed a portion of the operating costs of our regulator, the Finance Agency. The portion of the Finance Agency's expenses and working capital fund not allocated to Freddie Mac and Fannie Mae is allocated among the FHLBanks as assessments, which are based on the ratio of each FHLBank's minimum required regulatory capital to the aggregate minimum required regulatory capital of every FHLBank. For each of the years ended December 31, 2023 and 2022, our portion totaled $7 million.

Our proportionate share of the Office of Finance's operating and capital expenditures is calculated based upon two components as follows: (i) two-thirds based on our share of total consolidated obligations outstanding and (ii) one-third based on equal pro-rata allocation. For each of the years ended December 31, 2023 and 2022, our assessments to fund the Office of Finance totaled $5 million.

In addition to incurring a significant amount of ongoing compensation, benefits and other operating expenses to administer our AHP and other related programs, in 2023 we made voluntary allocations to our AHP of $1 million and other allocations to various affordable housing, small business and community investment programs totaling $3 million. The total voluntary allocation in 2023 of $4 million brought the sum of the Bank's total voluntary allocations for the years 2022 and 2023 up to its target of 5% of its net earnings for 2022.

AHP Assessments. The FHLBanks are required to set aside annually, in the aggregate, the greater of $100 million or 10% of net earnings to fund the AHP. For purposes of the AHP calculation, net earnings is defined as income before assessments, plus interest expense related to MRCS, if applicable. For the years ended December 31, 2023 and 2022, our AHP assessment was $44 million and $20 million, respectively. Our AHP assessment fluctuates in accordance with our net earnings.

Our voluntary contributions to AHP and other related programs are reported in other expenses. The combined required and voluntary contributions and allocations in 2023 totaled $48 million, an increase of $22 million, or 83%, compared to 2022, which further demonstrates our commitment to promoting affordable, sustainable and equitable housing in Michigan and Indiana.

Total Other Comprehensive Income (Loss). Total OCI for the years ended December 31, 2023 and 2022 consisted substantially of net unrealized losses on AFS securities. These amounts represent the portion of the changes in fair value that are not attributable to the risks being hedged in fair-value hedge relationships. These amounts were primarily impacted by changes in interest rates, credit spreads and volatility.

Operating Segments

Our products and services are grouped within two operating segments: traditional and mortgage loans.

Traditional. The traditional segment consists of (i) credit products (including advances, standby letters of credit, and lines of credit), (ii) investments (including federal funds sold, securities purchased under agreements to resell, interest-bearing demand deposit accounts, and investment securities), and (iii) correspondent services and deposits. The following table presents the financial performance of our traditional segment ($ amounts in millions).

	Years Ended December 31,	
Traditional	**2023**	**2022**
Net interest income	$ 444	$ 241
Provision for (reversal of) credit losses	—	—
Other income	47	20
Other expenses	104	97
Income before assessments	387	164
AHP assessments	40	17
Net income	$ 347	$ 147

The increase in net income for the traditional segment for the year ended December 31, 2023 compared to the prior year was primarily due to higher earnings on the portion of Bank's assets funded by its capital, driven by the increase in market interest rates, and an increase in the average balances outstanding of interest-earning assets, primarily advances.

Mortgage Loans. The mortgage loans segment consists substantially of mortgage loans purchased from our members through our MPP. The following table presents the financial performance of our mortgage loans segment ($ amounts in millions).

	Years Ended December 31,	
Mortgage Loans	**2023**	**2022**
Net interest income	$ 51	$ 50
Provision for (reversal of) credit losses	—	—
Other income (loss)	(1)	(1)
Other expenses	16	16
Income before assessments	34	33
AHP assessments	4	3
Net income	$ 30	$ 30

There was no meaningful change in net income for the mortgage loans segment for the year ended December 31, 2023 compared to the prior year.

Analysis of Financial Condition

Total Assets. The table below presents the comparative highlights of our major asset categories ($ amounts in millions).

	December 31, 2023		December 31, 2022	
Major Asset Categories	**Carrying Value**	**% of Total**	**Carrying Value**	**% of Total**
Advances	$ 35,562	46 %	$ 36,683	51 %
Mortgage loans held for portfolio, net	8,614	11 %	7,687	11 %
Cash and short-term investments	11,552	15 %	8,575	12 %
Trading securities	600	1 %	2,230	3 %
MBS	11,947	16 %	10,307	14 %
Other investment securities	7,504	10 %	6,113	8 %
Other assets [(1)]	829	1 %	689	1 %
Total assets	$ 76,608	100 %	$ 72,284	100 %

(1) Includes accrued interest receivable, premises, software and equipment, derivative assets and other miscellaneous assets.

Total assets as of December 31, 2023 were $76.6 billion, an increase of $4.3 billion, or 6%, compared to December 31, 2022, primarily driven by purchases of investments. The mix of our assets at December 31, 2023 changed compared to December 31, 2022 in that advances as a percent of total assets declined from 51% to 46%, primarily as a result of higher short-term investments.

Advances. In general, advances fluctuate in accordance with our members' funding needs, primarily determined by their deposit levels, mortgage pipelines, loan growth, investment opportunities, available collateral, other balance sheet strategies, and the cost of alternative funding options.

Advances at December 31, 2023 at carrying value totaled $35.6 billion, a net decrease of $1.1 billion, or 3%, compared to December 31, 2022. This decrease reflects the maturity of advances to a former depository member that were not eligible for renewal totaling $3.2 billion. Otherwise, advances outstanding to our depository members increased by $1.7 billion, or 8%, due to higher demand for advances to support their funding needs, and the availability of suitable products to assist our members in managing their balance sheets in the current economic environment. Rising market interest rates have had an adverse impact on our depository members' ability to liquidate their investment portfolios and increase their deposit levels to fund loan growth.

Our advances portfolio is well-diversified with advances to commercial banks and savings institutions, credit unions, and insurance companies. As a percent of total advances outstanding at par value, at December 31, 2023, advances to commercial banks and savings institutions were 47% and advances to credit unions were 15%, resulting in total advances to depository institutions of 62%, while advances to insurance companies were 38%.

The table below presents advances outstanding by type of financial institution ($ amounts in millions).

	December 31, 2023		December 31, 2022	
Borrower Type	**Par Value**	**% of Total**	**Par Value**	**% of Total**
Depository institutions:				
Commercial banks and saving institutions	$ 15,282	42 %	$ 13,920	37 %
Credit unions	5,471	15 %	5,163	14 %
Former members	1,617	5 %	4,772	13 %
Total depository institutions	22,370	62 %	23,855	64 %
Insurance companies:				
Captive insurance company [1]	115	— %	213	1 %
Other insurance companies	13,386	38 %	13,217	35 %
Former members [2]	5	— %	5	— %
Total insurance companies	13,506	38 %	13,435	36 %
CDFIs	1	— %	1	— %
Total advances outstanding	$ 35,877	100 %	$ 37,291	100 %

(1) Captive insurance companies that were admitted as FHLBank members prior to September 12, 2014, and did not meet the definition of "insurance company" or fall within another category of institution that is eligible for FHLBank membership under the Final Rule on FHLBank Membership, had their memberships terminated on February 19, 2021. The outstanding advances to one captive insurer are not required to be repaid prior to their various maturity dates through 2024.

(2) Other than captive insurance companies.

Our advances portfolio includes fixed- and variable-rate advances, as well as callable or prepayable and putable advances. Prepayable advances may be prepaid on specified dates without incurring repayment or termination fees. All other advances may only be prepaid by the borrower paying a fee that is sufficient to make us financially indifferent to the prepayment.

The following table presents the par value of advances outstanding by product type and redemption term, some of which contain call or put options ($ amounts in millions).

Product Type and Redemption Term	December 31, 2023 Par Value	December 31, 2023 % of Total	December 31, 2022 Par Value	December 31, 2022 % of Total
Fixed-rate:				
Without call or put options [1]				
Due in 1 year or less	$ 9,099	26 %	$ 13,592	36 %
Due after 1 through 5 years	12,309	34 %	7,559	20 %
Due after 5 through 15 years	1,935	5 %	1,696	5 %
Thereafter	14	— %	15	— %
Total	23,357	65 %	22,862	61 %
Callable or prepayable				
Due in 1 year or less	—	— %	2	— %
Due after 1 through 5 years	55	— %	—	— %
Due after 5 through 15 years	36	— %	41	— %
Total	91	— %	43	— %
Putable				
Due in 1 year or less	—	— %	5	— %
Due after 1 through 5 years	1,041	3 %	1,296	4 %
Due after 5 through 15 years	5,134	15 %	7,191	19 %
Total	6,175	18 %	8,492	23 %
Total fixed-rate	29,623	83 %	31,397	84 %
Variable-rate:				
Without call or put options				
Due in 1 year or less	311	1 %	515	2 %
Due after 1 through 5 years	410	1 %	160	— %
Due after 5 through 15 years	50	— %	—	— %
Total	771	2 %	675	2 %
Callable or prepayable				
Due in 1 year or less	370	1 %	403	1 %
Due after 1 through 5 years	3,335	9 %	3,011	8 %
Due after 5 through 15 years	1,412	4 %	1,450	4 %
Thereafter	366	1 %	355	1 %
Total	5,483	15 %	5,219	14 %
Total variable-rate	6,254	17 %	5,894	16 %
Total advances	$ 35,877	100 %	$ 37,291	100 %

[1] Includes amortizing/mortgage matched advances.

At December 31, 2023 and 2022, fixed-rate advances included $22.0 billion and $21.7 billion, respectively, that are swapped to effectively create variable-rate advances, consistent with our balance sheet strategies to manage interest-rate risk.

During the year ended December 31, 2023, the par value of advances due in one year or less decreased by 33%, while advances due after one year increased by 15%. As a result, advances due in one year or less, as a percentage of the total outstanding at par, totaled 27% at December 31, 2023, a decrease from 39% at December 31, 2022. However, based on the earlier of the redemption or the next put date, advances due in one year or less as a percentage of the total outstanding at par at December 31, 2023 and 2022 totaled 39% and 54%, respectively. For additional information, see *Notes to Financial Statements - Note 5 - Advances.*

The following table presents our variable-rate advances outstanding by the associated interest-rate index ($ amounts in millions).

Variable Interest-Rate Index	**December 31, 2023**	**December 31, 2022**
SOFR	$ 2,856	$ 2,401
FHLBanks cost of funds	3,151	1,870
LIBOR	—	1,278
Other	247	345
Total variable-rate advances, at par value	$ 6,254	$ 5,894

Through June 30, 2023, the Bank had exposure related to advances with interest rates indexed to LIBOR. However, the USD LIBOR index became fixed at June 30, 2023 and all of the Bank's fixed-rate LIBOR instruments were subsequently reset to SOFR or another interest rate. As a result, the Bank has no further exposure to LIBOR. For additional information, see *Item 7A. Quantitative and Qualitative Disclosures About Market Risk - Replacement of the LIBOR Benchmark Interest Rate.*

Mortgage Loans Held for Portfolio. We purchase fixed-rate mortgage loans from our members to support our housing mission, provide an additional source of liquidity to our members, diversify our assets, and generate additional earnings. In general, our volume of mortgage loans purchased is affected by several factors, including interest rates, competition, the general level of housing and refinancing activity in the United States, consumer product preferences, our balance sheet capacity and risk appetite, and regulatory considerations.

Mortgage loans held for portfolio at December 31, 2023, at carrying value, totaled $8.6 billion, a net increase of $927 million, or 12%, from December 31, 2022, as the Bank's purchases from its members exceeded principal repayments by borrowers.

The following table summarizes the activity in the UPB of mortgage loans held for portfolio ($ amounts in millions).

Mortgage Loans Activity	**2023**	**2022**	**2021**
Balance, beginning of year	$ 7,533	$ 7,434	$ 8,323
Purchases	1,613	1,146	2,082
Principal repayments	(693)	(1,047)	(2,971)
Balance, end of year	$ 8,453	$ 7,533	$ 7,434

All of our mortgage loans have fixed interest rates. Rising mortgage rates resulted in lower levels of prepayment by our borrowers. However, purchases increased in 2023 due to strong demand by our members to participate in our Advantage MPP.

A breakdown of the UPB of mortgage loans held for portfolio by primary product type is presented below ($ amounts in millions).

	December 31, 2023		**December 31, 2022**	
Product Type	**UPB**	**% of Total**	**UPB**	**% of Total**
MPP:				
Conventional Advantage	$ 8,043	95 %	$ 7,082	94 %
Conventional Original	200	2 %	236	3 %
FHA	135	2 %	128	2 %
Total MPP	8,378	99 %	7,446	99 %
Total Mortgage Partnership Finance® Program	75	1 %	87	1 %
Total mortgage loans held for portfolio	$ 8,453	100 %	$ 7,533	100 %

The following table presents the UPB of mortgage loans by redemption term ($ amounts in millions).

Redemption Term	December 31, 2023	December 31, 2022
Due in 1 year or less	$ 300	$ 287
Due after 1 through 5 years	1,252	1,206
Due after 5 through 15 years	3,128	2,943
Thereafter	3,773	3,097
Total mortgage loans held for portfolio, UPB	$ 8,453	$ 7,533

We maintain an allowance for credit losses based on our best estimate of expected losses over the remaining life of each loan. The following table presents the components of the allowance for credit losses, including the credit enhancement waterfall for MPP ($ amounts in millions).

Components of Allowance	December 31, 2023	December 31, 2022
MPP expected losses remaining after borrower's equity, before credit enhancements	$ 3.0	$ 4.7
Portion of expected losses recoverable from credit enhancements:		
PMI	(1.2)	(1.4)
LRA [(1)]	(1.6)	(3.0)
SMI	(0.1)	(0.2)
Total portion recoverable from credit enhancements	(2.9)	(4.6)
Allowance for unrecoverable PMI/SMI	—	—
Allowance for MPP credit losses	0.1	0.1
Allowance for Mortgage Partnership Finance® Program credit losses	—	0.1
Allowance for credit losses	$ 0.1	$ 0.2

(1) Amounts recoverable are limited to (i) the expected losses remaining after borrower's equity and PMI and (ii) the remaining balance in each pool's portion of the LRA. The remainder of the total LRA balance is available to cover any losses not yet expected and to distribute any excess funds to the PFIs.

Our MPP was designed to require loan servicers to foreclose loans and liquidate properties in the servicer's name rather than in the Bank's name. Therefore, we do not take title to any foreclosed property or enter into any other legal agreement under which the borrower conveys all interest in the property to the Bank to satisfy the loan. Upon completion of a triggering event (short sale, deed in lieu of foreclosure, foreclosure sale or post-sale confirmation or ratification, as applicable), the servicer is required to remit to us the full UPB and accrued interest at the next feasible remittance. Upon receipt of the full UPB and accrued interest, the mortgage loan is derecognized from the statement of condition. As a result of these factors, we do not classify as Real Estate Owned any foreclosed properties collateralizing MPP loans that were previously recorded on the statement of condition.

However, in the case of a delay in receiving final payoff from the servicer beyond the second remittance cycle after a triggering event, we reclassify the amount owed from mortgage loans to a separate amount receivable from the servicer. The receivable is then evaluated for the amount expected to be recovered. The servicer files a claim against the various credit enhancements for reimbursement of any losses incurred. The claim is then reviewed and paid as appropriate under the various credit enhancement policies or guidelines.

We individually evaluate any remaining exposure to delinquent MPP conventional loans paid in full by the servicers. An estimate of the loss, if any, is equal to the estimated cost associated with maintaining and disposing of the property (which includes the UPB, interest owed on the delinquent loan to date, and estimated costs associated with disposing of the collateral) less the estimated fair value of the collateral (net of estimated selling costs) and the amount of credit enhancements including the PMI, LRA and SMI. The estimated fair value of the collateral is obtained from United States Department of Housing and Urban Development statements, sales listings or other evidence of current expected liquidation amounts. At December 31, 2023, principal previously paid in full by our MPP servicers totaling $0.5 million remains subject to potential claims by those servicers for any losses resulting from past or future liquidations of the underlying properties.

Liquidity and Other Investment Securities. We maintain our investment portfolio to provide liquidity, support housing finance, utilize balance sheet capacity and supplement our earnings. The earnings on our investments bolster our capacity to meet our commitments to affordable housing and community development and to cover operating expenses. The following table presents a comparison of the components of our liquidity investments and other investment securities at carrying value ($ amounts in millions).

	December 31, 2023		December 31, 2022	
Components	**Carrying Value**	**% of Total**	**Carrying Value**	**% of Total**
Liquidity investments:				
Cash and short-term investments:				
Cash and due from banks	$ 59	— %	$ 21	— %
Interest-bearing deposits	892	3 %	856	3 %
Securities purchased under agreements to resell	6,500	20 %	4,550	17 %
Federal funds sold	4,101	13 %	3,148	12 %
Total cash and short-term investments	11,552	36 %	8,575	32 %
Trading securities:				
U.S. Treasury obligations	600	2 %	2,230	8 %
Total trading securities	600	2 %	2,230	8 %
Total liquidity investments	12,152	38 %	10,805	40 %
Other investment securities:				
AFS securities:				
U.S. Treasury obligations	5,697	18 %	4,210	16 %
GSE and TVA debentures	1,807	6 %	1,903	7 %
GSE multifamily MBS	6,690	21 %	6,067	22 %
Total AFS securities	14,194	45 %	12,180	45 %
HTM securities:				
Other U.S. obligations single-family MBS	4,010	13 %	2,992	11 %
GSE single-family MBS	684	2 %	620	2 %
GSE multifamily MBS	563	2 %	628	2 %
Total HTM securities	5,257	17 %	4,240	15 %
Total other investment securities	19,451	62 %	16,420	60 %
Total cash and investments, carrying value	$ 31,603	100 %	$ 27,225	100 %

Liquidity Investments. The total outstanding balance and composition of our liquidity investments are influenced by our liquidity needs, regulatory requirements, actual and anticipated member advance activity, market conditions, and the availability of short-term investments at attractive interest rates, relative to our cost of funds.

Cash and short-term investments at December 31, 2023 totaled $11.6 billion, an increase of $3.0 billion, or 35%, from December 31, 2022. Cash and short-term investments as a percent of total assets at December 31, 2023 and 2022 totaled 15% and 12%, respectively.

The Bank has previously purchased fixed-rate U.S. Treasury obligations as trading securities to enhance its liquidity. Such securities outstanding at December 31, 2023 totaled $600 million, a decrease of $1.6 billion, or 73%, from December 31, 2022, as substantially all of the Bank's purchases of U.S. Treasury obligations in 2023 were classified as AFS.

Liquidity investments at December 31, 2023 totaled $12.2 billion, an increase of $1.3 billion, or 12%, from December 31, 2022.

Other Investment Securities. AFS securities at December 31, 2023 totaled $14.2 billion, a net increase of $2.0 billion, or 17%, from December 31, 2022. The increase resulted primarily from purchases of U.S. Treasury obligations.

Net unrealized gains (losses) on AFS securities, excluding the portion of the changes in fair value that are attributable to the risks being hedged in fair-value hedging relationships, at December 31, 2023 totaled $(60) million, compared to $(10) million at December 31, 2022, primarily due to changes in interest rates, credit spreads and volatility.

HTM securities at December 31, 2023 totaled $5.3 billion, a net increase of $1.0 billion, or 24%, from December 31, 2022. The increase was primarily due to purchases of other U.S. obligations, in which the MBS are guaranteed by Ginnie Mae and the underlying loans are insured by the FHA.

Net unrecognized gains (losses) on HTM securities at December 31, 2023 totaled $(77) million, compared to $(84) million at December 31, 2022, primarily due to changes in interest rates, credit spreads and volatility.

Interest-Rate Payment Terms. Our other investment securities are presented below by interest-rate payment terms ($ amounts in millions).

	December 31, 2023		December 31, 2022	
Interest-Rate Payment Terms	**Amortized Cost**	**% of Total**	**Amortized Cost**	**% of Total**
AFS Securities [1]:				
Total non-MBS fixed-rate	$ 7,501	53 %	$ 6,091	50 %
Total MBS fixed-rate	6,753	47 %	6,099	50 %
Total AFS securities	$ 14,254	100 %	$ 12,190	100 %
HTM Securities:				
Total MBS fixed-rate	$ 199	4 %	$ 204	5 %
Total MBS variable-rate	5,058	96 %	4,036	95 %
Total HTM securities	$ 5,257	100 %	$ 4,240	100 %
AFS and HTM securities:				
Total fixed-rate	$ 14,453	74 %	$ 12,394	75 %
Total variable-rate	5,058	26 %	4,036	25 %
Total AFS and HTM securities	$ 19,511	100 %	$ 16,430	100 %

(1) Carrying value is equal to estimated fair value.

The mix of fixed- vs. variable-rate AFS and HTM securities at December 31, 2023 changed slightly from December 31, 2022. However, all of the fixed-rate AFS securities are swapped using derivative instruments to effectively create variable-rate securities, consistent with our balance sheet strategies to manage interest-rate risk.

Investments by Year of Contractual Maturity. The following table provides, by year of contractual maturity, carrying values and yields for AFS and HTM securities as of December 31, 2023 ($ amounts in millions).

Investments	Due in one year or less	Due after one year through five years	Due after five years through ten years	Due after ten years	Total
AFS Securities:					
U.S. Treasury obligations	$ —	$ 3,285	$ 2,412	$ —	$ 5,697
GSE and TVA debentures	306	1,352	149	—	1,807
GSE MBS [1]	—	2,677	3,654	359	6,690
Total AFS securities	306	7,314	6,215	359	14,194
HTM Securities:					
Other U.S. obligations - guaranteed MBS [1]	—	—	—	4,010	4,010
GSE MBS [1]	—	2	261	984	1,247
Total HTM securities	—	2	261	4,994	5,257
Total AFS and HTM securities, carrying value	$ 306	$ 7,316	$ 6,476	$ 5,353	$ 19,451
Yield on AFS securities [2]	2.32 %	2.63 %	3.34 %	2.95 %	
Yield on HTM securities [2]	— %	6.21 %	5.69 %	4.82 %	

(1) Year of redemption on our MBS is based on contractual maturity. Their actual maturities will likely differ from contractual maturities as borrowers have the right to prepay their obligations with or without prepayment fees.

(2) The weighted average yields on AFS and HTM securities are calculated as the sum of each debt security using the period end balances multiplied by the coupon rate adjusted by the impact of amortization and accretion of premiums and discounts, divided by the total debt securities in the applicable AFS or HTM portfolio. The result is then multiplied by 100 to express it as a percentage.

At December 31, 2023, based on contractual maturities, as a percentage of total carrying value, AFS and HTM securities due in one year or less were 2%, due after one year through five years were 38%, due after 5 years through 10 years were 33%, and due after 10 years were 27%.

The following table presents our variable-rate MBS outstanding by the associated interest-rate index ($ amounts in millions).

Variable Interest-Rate Index	December 31, 2023	December 31, 2022
SOFR	$ 5,037	$ 1,994
LIBOR	—	2,018
Total variable-rate MBS, at principal amount	$ 5,037	$ 4,012

Through June 30, 2023, the Bank had exposure related to MBS with interest rates indexed to LIBOR. However, the USD LIBOR index became fixed at June 30, 2023 and all of the Bank's fixed-rate LIBOR instruments were subsequently reset to SOFR or another interest rate. As a result, the Bank has no further exposure to LIBOR. For additional information, see *Item 7A. Quantitative and Qualitative Disclosures About Market Risk - Replacement of the LIBOR Benchmark Interest Rate.*

Under the Finance Agency's Prudential Management and Operations Standards, if our non-advance assets were to grow by more than 30% over the six calendar quarters preceding a Finance Agency determination that we have failed to meet any of these standards, the Finance Agency would be required to impose one or more sanctions on us, which could include, among others, a limit on asset growth, an increase in the level of retained earnings, and a prohibition on dividends or the redemption or repurchase of capital stock. Through the six-quarter period ended December 31, 2023, our growth in non-advance assets did not exceed 30%.

Total Liabilities. Total liabilities at December 31, 2023 were $72.9 billion, a net increase of $4.0 billion, or 6%, from December 31, 2022, substantially due to an increase in consolidated obligations.

Deposits (Liabilities). Total deposits at December 31, 2023 were $629 million, a net increase of $33 million, or 6%, from December 31, 2022. These deposits provide a relatively small portion of our funding but can fluctuate from period to period and vary depending upon such factors as the attractiveness of our deposit pricing relative to the rates available on alternative money market instruments, members' preferences with respect to the maturity of their investments, and members' liquidity. The balances of these accounts are uninsured.

The following table presents our term deposits outstanding at par value ($ amounts in millions).

Term	December 31, 2023	December 31, 2022
3 months or less	$ 16	$ 12
Over 3 months through 6 months	—	3
Over 6 months through 12 months	4	9
Total term deposits	$ 20	$ 24

For details on the average balances and average rates paid, see *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Results of Operations and Changes in Financial Condition - Analysis of Results of Operations for the Years Ended December 31, 2023 and 2022.*

Consolidated Obligations. The overall balance of our consolidated obligations fluctuates in relation to our total assets. The carrying value of consolidated obligations outstanding at December 31, 2023 totaled $71.1 billion, a net increase of $3.8 billion, or 6%, from December 31, 2022, which reflected increased funding needs associated with the net increase in the Bank's total assets.

The composition of our consolidated obligations can fluctuate significantly based on comparative changes in their cost levels, supply and demand conditions, demand for various types and maturities of advances, and our overall balance sheet management strategy. Discount notes are issued to provide short-term funds, while CO bonds are generally issued to provide a longer-term mix of funding. Some CO bonds are issued with terms which permit us to repay them when more favorable funding opportunities emerge. We apply a variety of strategies to effectively manage the balance and structure of our consolidated obligations as market conditions and our asset levels change.

The following table presents a breakdown by term of our consolidated obligations outstanding ($ amounts in millions).

	December 31, 2023		December 31, 2022	
Term	Par Value	% of Total	Par Value	% of Total
Consolidated obligations due in 1 year or less:				
Discount notes	$ 22,737	31 %	$ 27,534	40 %
CO bonds	20,137	28 %	10,016	14 %
Total due in 1 year or less	42,874	59 %	37,550	54 %
Long-term CO bonds	29,690	41 %	31,986	46 %
Total consolidated obligations	$ 72,564	100 %	$ 69,536	100 %

The mix of our funding has changed from December 31, 2022 as discount notes outstanding decreased and CO bonds outstanding increased.

We continue to seek to maintain a sufficient liquidity and funding balance between our financial assets and financial liabilities. Additionally, in light of each FHLBank's significant reliance on short-term funding, the FHLBanks work collectively to manage FHLB System-wide liquidity and funding and jointly monitor System-wide refinancing risk, i.e. the potential difficulty or inability to roll over short-term consolidated obligations when market conditions change. In managing and monitoring the amounts of assets that require refunding, the FHLBanks may consider contractual maturities of the financial assets, as well as certain assumptions regarding expected cash flows (i.e., estimated prepayments and scheduled amortizations).

At December 31, 2023 and 2022, callable CO bonds were 72% and 71%, respectively, of total CO bonds outstanding.

At December 31, 2023 and 2022, 82% and 79%, respectively, of our fixed-rate CO bonds were swapped using derivative instruments to effectively create variable-rate CO bonds, consistent with our balance sheet strategies to manage interest-rate risk. All of our variable-rate CO bonds outstanding at December 31, 2023 and 2022 were indexed to SOFR.

Derivatives. We classify interest-rate swaps as derivative assets or liabilities according to the net estimated fair value of the interest-rate swaps with each counterparty. As of December 31, 2023 and 2022, we had derivative assets, net of collateral held or posted, including accrued interest, with estimated fair values of $521 million and $434 million, respectively, and derivative liabilities, net of collateral held or posted, including accrued interest, with estimated fair values of $7 million and $19 million, respectively. The estimated fair values are based on a wide range of factors, including current and projected levels of interest rates, credit spreads and volatility. Increases and decreases in the fair value of derivatives are primarily caused by changes in the derivatives' respective underlying interest-rate indices.

The volume of derivative hedges is often expressed in terms of notional amounts, which is the amount upon which interest payments are calculated. The following table presents the notional amounts by type of hedged item regardless of whether it is in a qualifying hedge relationship ($ amounts in millions).

Hedged Item	**December 31, 2023**	**December 31, 2022**
Advances	$ 21,950	$ 24,038
Investments	16,713	15,936
Mortgage loans MDCs	115	61
CO bonds	38,094	30,940
Discount notes	—	2,000
Total notional outstanding	$ 76,872	$ 72,975

The increase in the total notional amount during the year-ended December 31, 2023 of $3.9 billion, or 5%, was substantially due to an increase in derivatives hedging CO bonds, driven primarily by an increase in short-term CO bonds outstanding, partially offset by a decrease in swapped variable-rate advances.

The following table presents the notional amounts of derivatives (cleared and uncleared) by pay or receive leg ($ amounts in millions).

	December 31, 2023		**December 31, 2022**	
Interest rate swaps outstanding	**Pay Leg**	**Receive Leg**	**Pay Leg**	**Receive Leg**
Fixed rate	$ 38,778	$ 39,019	$ 37,736	$ 33,611
SOFR	31,879	31,390	25,691	26,952
EFFR	6,215	6,463	7,048	6,969
LIBOR	—	—	2,500	5,443
Total notional	$ 76,872	$ 76,872	$ 72,975	$ 72,975

Through June 30, 2023, the Bank had exposure related to derivatives with interest rates indexed to LIBOR. However, the USD LIBOR index became fixed at June 30, 2023 and all of the Bank's fixed-rate LIBOR instruments were subsequently reset to SOFR or another interest rate. As a result, the Bank has no further exposure to LIBOR. For additional information, see *Item 7A. Quantitative and Qualitative Disclosures About Market Risk - Replacement of the LIBOR Benchmark Interest Rate.*

We utilize a variety of permissible hedge accounting methods. While a majority of our qualifying hedging relationships utilize the total contractual coupon long-haul method, we also apply the benchmark component or shortcut method where eligible and in alignment with our hedging strategies. The application of the shortcut method results in no hedge ineffectiveness, while the application of the benchmark component method results in less hedge ineffectiveness than the total contractual coupon long-haul method.

The following table presents the notional amounts of derivatives by hedge accounting method ($ amounts in millions).

Hedge Accounting Method	**December 31, 2023**	**December 31, 2022**
Fair-value hedges:		
Long-haul total contractual coupon method	$ 55,207	$ 47,482
Long-haul benchmark component method	2,683	2,472
Shortcut method	17,446	16,149
Total fair-value hedges	75,336	66,103
Economic hedges	1,479	6,841
MDCs	57	31
Total notional outstanding	$ 76,872	$ 72,975

For additional information on our accounting policies related to derivatives and hedging, see *Note 1 - Summary of Significant Accounting Policies*.

The following table presents the cumulative impact of fair-value hedging basis adjustments on our statement of condition ($ amounts in millions).

	December 31, 2023			
	Advances	**AFS Securities**	**CO Bonds**	**Total**
Cumulative fair-value hedging basis gains (losses) on hedged items	$ (320)	$ (779)	$ 1,411	$ 312
Estimated fair value of associated derivatives, net	318	986	(1,406)	(102)
Net cumulative fair-value hedging gains (losses)	$ (2)	$ 207	$ 5	$ 210

The cumulative gains on AFS securities resulted from our strategy of terminating certain interest-rate swaps associated with certain MBS and entering into hedging relationships with new interest-rate swaps in connection with our LIBOR transition. The net cumulative fair-value hedging gains on AFS securities includes losses on the terminated swaps that are being amortized into earnings as interest expense over the life of the original swap, but are generally being offset by the lower interest expense on the new swaps.

Total Capital. Total capital at December 31, 2023 was $3.7 billion, a net increase of $360 million, or 11%, from December 31, 2022. The net increase primarily resulted from the growth of retained earnings and issuances of capital stock to support advances activity, partially offset by the Bank's voluntary repurchases of its members' excess stock during the third quarter.

The following table presents a percentage breakdown of the components of GAAP capital.

Components	**December 31, 2023**	**December 31, 2022**
Capital stock	61 %	63 %
Retained earnings	41 %	38 %
AOCI	(2)%	(1)%
Total GAAP capital	100 %	100 %

The changes in the components of GAAP capital at December 31, 2023 compared to December 31, 2022 were primarily due to the growth of retained earnings and the voluntary repurchase of member's excess capital stock.

The following table presents a reconciliation of GAAP capital to regulatory capital ($ amounts in millions).

Reconciliation	**December 31, 2023**	**December 31, 2022**
Total GAAP capital	$ 3,744	$ 3,384
Exclude: Accumulated other comprehensive loss	73	26
Add: MRCS	369	373
Total regulatory capital	$ 4,186	$ 3,783

Liquidity

We endeavor to manage our liquidity in order to be able at all times to satisfy our members' needs for short- and long-term funds, repay maturing consolidated obligations, redeem or repurchase excess stock and meet other financial obligations. We are required to maintain liquidity in accordance with the Bank Act, certain Finance Agency regulations and related policies established by our management and board of directors.

Our primary sources of liquidity are holdings of liquid assets, comprised of cash, short-term investments, and trading securities, as well as the issuance of consolidated obligations.

Historically, our status as a GSE and favorable credit ratings have provided us with excellent access to capital markets. Our ability to obtain funds through the issuance of consolidated obligations at acceptable interest costs depends on prevailing conditions in the capital markets, particularly the short-term capital markets, and the capital markets' perception of the riskiness of those obligations. Our consolidated obligations are not obligations of, and they are not guaranteed by, the United States government, although they have historically received the same credit rating as the United States government bond credit rating. The rating has not been affected by rating actions taken with respect to individual FHLBanks. During the year ended December 31, 2023, we maintained sufficient access to funding; our net proceeds from the issuance of consolidated obligations totaled $831.1 billion.

In addition, by statute, the United States Secretary of the Treasury may acquire our consolidated obligations up to an aggregate principal amount outstanding of $4.0 billion. This statutory authority may be exercised only if alternative means cannot be effectively employed to permit us to continue to supply reasonable amounts of funds to the mortgage market, and the ability to supply such funds is substantially impaired because of monetary stringency and a high level of interest rates. Any funds borrowed would be repaid at the earliest practicable date. As of this date, this authority has never been exercised.

However, to protect us against temporary disruptions in access to the debt markets, the Finance Agency currently requires us to: (i) maintain contingent liquidity sufficient to cover, at a minimum, 20 calendar days of inability to issue consolidated obligations; (ii) have available at all times an amount greater than or equal to our members' current deposits invested in specific assets; (iii) maintain, in the aggregate, unpledged qualifying assets in an amount at least equal to our participation in total consolidated obligations outstanding; and (iv) maintain, through short-term investments, an amount at least equal to our anticipated cash outflows under hypothetical adverse scenarios. We anticipate our liquidity will continue to meet or exceed the Finance Agency's standards going forward.

The Finance Agency also provides guidance related to asset/liability maturity funding gap limits. Funding gap metrics measure the difference between assets and liabilities that are scheduled to mature during a specified period of time and are expressed as a percentage of total assets. As of December 31, 2023, we were operating within those limits.

To support member deposits, the Bank Act requires us to have at all times a liquidity deposit reserve in an amount equal to the current deposits received from our members invested in (i) obligations of the United States, (ii) deposits in eligible banks or trust companies, or (iii) advances with a maturity not exceeding five years. The following table presents our excess liquidity deposit reserves ($ amounts in millions).

	December 31, 2023	December 31, 2022
Liquidity deposit reserves	$ 44,120	$ 42,388
Less: total deposits	629	596
Excess liquidity deposit reserves	$ 43,491	$ 41,792

The increase in liquidity deposit reserves is primarily due to purchases of Ginnie Mae MBS and an increase in short-term investments.

We must maintain assets that are free from any lien or pledge in an amount at least equal to the amount of our consolidated obligations outstanding from among the following types of qualifying assets:

- cash;
- obligations of, or fully guaranteed by, the United States;
- advances;
- mortgages that have any guaranty, insurance, or commitment from the United States or any agency of the United States; and
- investments described in Section 16(a) of the Bank Act, which include, among others, securities that a fiduciary or trustee may purchase under the laws of the state in which the FHLBank is located.

The following table presents the aggregate amount of our qualifying assets to the total amount of our consolidated obligations outstanding ($ amounts in millions).

	December 31, 2023	December 31, 2022
Aggregate qualifying assets	$ 75,967	$ 71,747
Less: total consolidated obligations outstanding	71,053	67,270
Aggregate qualifying assets in excess of consolidated obligations	$ 4,914	$ 4,477
Ratio of aggregate qualifying assets to consolidated obligations	1.07	1.07

We also maintain a contingency liquidity plan designed to enable us to meet our obligations and the liquidity needs of our members in the event of short-term capital market disruptions or operational disruptions at our Bank and/or the Office of Finance.

New or revised regulatory guidance from the Finance Agency could continue to increase the amount and change the characteristics of liquidity that we are required to maintain. We have not identified any other trends, demands, commitments, or events that are likely to materially increase or decrease our liquidity.

Changes in Cash Flow. The balances of our assets and liabilities can vary significantly in the normal course of business due to the amount and timing of cash flows, which are affected by member-driven activities and market conditions. Net cash provided by operating activities for the year ended December 31, 2023 was $189.4 million, compared to net cash provided by operating activities for the year ended December 31, 2022 of $1.5 billion. The net decrease in cash provided of $1.3 billion was substantially due to the fluctuation in variation margin payments on cleared derivatives. Such payments are treated by the Clearinghouses as daily settled contracts.

Capital Resources

Our financial strategies are generally designed to enable us to safely expand and contract our assets, liabilities, and capital in response to changes in our member base and in our members' credit needs. Our capital generally grows when members are required to purchase additional capital stock as they increase their advances borrowings or other business activities with us and from the consistent accumulation of retained earnings. We may also repurchase excess capital stock from our members as business activities with them decline. In addition, in order to meet internally established thresholds or to meet our regulatory capital requirement, we, at the discretion of our board of directors, could undertake capital preservation initiatives such as: (i) voluntarily reducing or eliminating dividend payments; (ii) suspending excess capital stock repurchases; or (iii) raising capital stock holding requirements for our members.

Total Regulatory Capital Stock. The following table provides a breakdown of our outstanding capital stock and MRCS by type of member ($ amounts in millions).

	December 31, 2023		December 31, 2022	
Type of Member	**Amount**	**% of Total**	**Amount**	**% of Total**
Capital Stock:				
Depository institutions:				
Commercial banks and savings institutions	$ 1,031	39 %	$ 889	36 %
Credit unions	461	17 %	409	16 %
Total depository institutions	1,492	56 %	1,298	52 %
Insurance companies	793	30 %	825	33 %
CDFIs	—	— %	—	— %
Total capital stock, putable at par value	2,285	86 %	2,123	85 %
MRCS:				
Captive insurance company [1]	5	— %	10	— %
Other former members	364	14 %	363	15 %
Total MRCS	369	14 %	373	15 %
Total regulatory capital stock	$ 2,654	100 %	$ 2,496	100 %

(1) Represents a captive insurance company whose membership was terminated on February 19, 2021. On that date, we repurchased its excess stock of $18 million. The remaining balance will not be fully redeemed until the associated credit products are no longer outstanding.

Required and Excess Capital Stock. Capital stock that is not required as a condition of membership or to support outstanding obligations of members or former members to us is considered excess capital stock under our capital plan. In general, the level of excess capital stock fluctuates with our members' level of credit products and, to the extent members have opted-in to AMA activity-based stock requirements, principal amounts of MDCs.

The following table presents the composition of our regulatory capital stock ($ amounts in millions).

Components	December 31, 2023	December 31, 2022
Required capital stock:		
Member capital stock	$ 1,800	$ 1,678
MRCS	79	225
Total required capital stock	1,879	1,903
Excess capital stock:		
Member capital stock not subject to outstanding redemption requests	485	445
Member capital stock subject to outstanding redemption requests	—	—
MRCS	290	148
Total excess capital stock	775	593
Total regulatory capital stock	$ 2,654	$ 2,496
Excess stock as a percentage of regulatory capital stock	29 %	24 %

The increase in required member capital stock in 2023 included elevated disbursements of short-term advances during the first quarter of 2023. However, for those advances that matured and were not replaced, the associated capital stock was reclassified to excess stock, resulting in an increase in excess stock during the year. This increase was substantially offset by the Bank's voluntary repurchases on September 27, 2023 totaling $200 million to reduce the amount of outstanding member excess stock relative to the Bank's assets.

Under our capital plan, the Bank is required to repurchase excess stock if its regulatory capital ratio as of the last day of any month exceeds a specific ratio established by the board of directors from time to time, currently 5.75%, by at least 25 bps. As a result, the current threshold for repurchase is a regulatory capital ratio of 6.0%. Our regulatory capital ratio at December 31, 2023 was 5.46%. Excess stock must be repurchased under these circumstances only to the extent required to reduce the Bank's regulatory capital ratio to such specified ratio. Otherwise, we are not required to redeem excess stock from a member until five years (or, in the case of Class A stock, six months) after the earliest of (i) termination of the membership, (ii) our receipt of notice of voluntary withdrawal from membership, or (iii) the member's request for redemption of its excess stock. At our discretion, we may also voluntarily repurchase, and have repurchased from time to time, excess stock upon approval of our board of directors and with 15 days' notice to the member in accordance with our capital plan.

Statutory and Regulatory Restrictions on Capital Stock Redemption. In accordance with the Bank Act, each class of FHLBank stock is considered putable by the member. However, there are significant statutory and regulatory restrictions on our obligation to redeem, or right to repurchase, the outstanding stock, including the following:

- We may not redeem or repurchase any capital stock if, following such action, we would fail to satisfy any of our minimum capital requirements. By law, no capital stock may be redeemed or repurchased at any time at which we are undercapitalized.
- We may not redeem or repurchase any capital stock without approval of the Finance Agency if either our board of directors or the Finance Agency determines that we have incurred, or are likely to incur, losses resulting, or expected to result, in a charge against capital while such charges are continuing or expected to continue.

Additionally, we may not redeem or repurchase shares of capital stock from any member if (i) the principal or interest due on any consolidated obligation has not been paid in full when due; (ii) we fail to certify in writing to the Finance Agency that we will remain in compliance with our liquidity requirements and will remain capable of making full and timely payment of all of our current obligations; (iii) we notify the Finance Agency that we cannot provide the foregoing certification, project that we will fail to comply with statutory or regulatory liquidity requirements or will be unable to timely and fully meet all of our obligations; (iv) we actually fail to comply with statutory or regulatory liquidity requirements or to timely and fully meet all of our current obligations; or (v) we enter or negotiate to enter into an agreement with one or more FHLBanks to obtain financial assistance to meet our current obligations.

If, during the period between receipt of a stock redemption notification from a member and the actual redemption (which may last indefinitely if any of the restrictions on capital stock redemption discussed above have occurred), the Bank is liquidated, merged involuntarily, or merged upon our board of directors' approval or consent with one or more other FHLBanks, the consideration for the stock or the redemption value of the stock will be established after the settlement of all senior claims. Generally, no claims would be subordinated to the rights of our shareholders.

Our capital plan permits us, at our discretion, to retain the proceeds of redeemed or repurchased stock if we determine that there is an existing or anticipated collateral deficiency related to any obligations of the member to us until the member delivers other collateral to us, such obligations have been satisfied or the anticipated collateral deficiency is otherwise resolved to our satisfaction.

If the Bank were to be liquidated, after payment in full to our creditors, our shareholders would be entitled to receive the par value of their capital stock as well as retained earnings, if any, in an amount proportional to the shareholder's allocation of total shares of Class B stock at the time of liquidation. In the event of a merger or consolidation, our board of directors must determine the rights and preferences of our shareholders, subject to any terms and conditions imposed by the Finance Agency.

Capital Distributions. Our board of directors seeks to reward our members with a sufficient, risk-adjusted return on their investment, particularly those who actively utilize our products and services. Our board of directors' decision to declare dividends is influenced by our financial condition, adequacy of retained earnings and overall financial performance, as well as actual and anticipated developments in the overall economic and financial environment, including the level of interest rates and conditions in the mortgage and credit markets. In addition, our board of directors considers several other factors, including our risk profile, regulatory requirements, our relationship with our members and the stability of our current capital stock position and membership.

The following table summarizes the weighted-average dividend rate paid on our Class B stock, including MRCS[(1)]:

	2023	2022	2021
First quarter [(2)]	4.84 %	2.31 %	2.44 %
Second quarter [(2)]	5.44 %	2.46 %	2.48 %
Third quarter [(2)]	5.88 %	3.41 %	2.24 %
Fourth quarter [(2)]	6.47 %	3.55 %	2.25 %
Year	5.69 %	2.94 %	2.36 %

(1) Dividends paid in cash during the period divided by the average amount of Class B stock eligible for dividends under our capital plan, including MRCS, for the dividend period.
(2) Annualized.

The following table summarizes by year our dividend payout ratio.

	Years Ended December 31,		
	2023	2022	2021
Dividend payout ratio [(1)]	34.87 %	38.16 %	57.67 %

(1) Dividends paid in cash during the year divided by net income for the year.

Although the dividend rate for the year ended December 31, 2023 was significantly higher than the rate for 2022, the dividend payout ratio was lower due to the significant increase in net income.

On February 22, 2024, our board of directors declared a cash dividend on Class B-2 activity-based stock at an annualized rate of 9.0% and on Class B-1 non-activity-based stock at an annualized rate of 4.0%, resulting in a spread between the rates of 5.0 percentage points. The overall weighted-average annualized rate paid was 7.41%. The dividends were paid in cash on February 23, 2024. For more information on our capital plan and dividend payments, see *Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.*

Retained Earnings. The overall adequacy of the Bank's level of retained earnings is evaluated in the context of its overall capitalization. However, we seek to maintain a level of retained earnings that consistently exceeds a minimum level based on the amount we believe is necessary to protect the redemption value of the Bank's capital stock. This minimum is equal to our estimate of the Bank's economic risk that incorporates specified market, credit, operations, and accounting risk estimates. We regularly monitor the adequacy of the Bank's retained earnings. If an increase is deemed necessary, we could evaluate various alternative strategies, such as restructuring the balance sheet, reducing our risk tolerances, increasing capital stock requirements or reducing dividends on capital stock. However, we also seek to maintain competitive dividends, consistent with our mission objective of providing a sufficient return to our members that reflects the Bank's risk profile and makes stock ownership a desirable investment alternative.

Restricted Retained Earnings. In accordance with the JCEA, we allocate 20% of our net income each quarter to a restricted retained earnings account until the balance of that account equals at least 1% of the average balance of outstanding consolidated obligations for the quarter. These restricted retained earnings will not be available from which to pay dividends except to the extent the restricted retained earnings balance exceeds 1.5% of the Bank's average balance of outstanding consolidated obligations for the quarter. We do not expect either level to be reached for several years.

Adequacy of Capital. In addition to possessing the authority to prohibit stock redemptions, our board of directors has the right to require our members to make additional capital stock purchases as needed to satisfy statutory and regulatory capital requirements.

Our board of directors has a statutory obligation to review and adjust member capital stock requirements in order to comply with our minimum capital requirements, and each member must comply promptly with any such requirement. However, a member could reduce its outstanding business with us as an alternative to purchasing stock.

We are required to maintain a ratio of total regulatory capital stock to total assets, measured on a daily average basis at month end, of at least two percent.

Our board of directors assesses the adequacy of our capital every quarter, prior to the declaration of our quarterly dividend, by reviewing various measures set forth in our Capital Markets Policy. The development of our Capital Markets Policy incorporated guidance from the Finance Agency.

We must maintain sufficient permanent capital to meet the combined credit risk, market risk and operational risk components of the risk-based capital requirement.

- **Permanent capital** is defined as the amount of our Class B stock (including MRCS) plus our retained earnings. We are required to maintain permanent capital at all times in an amount equal to our risk-based capital requirement, which includes the following components:
    - **Credit risk**, which represents the sum of our credit risk charges for all assets, off-balance sheet items and derivative contracts, calculated using the methodologies and risk weights assigned to each classification in the regulations;
    - **Market risk**, which represents the sum of the market value of our portfolio at risk from movements in interest rates, foreign exchange rates, commodity prices, and equity prices that could occur during periods of market stress, and the amount by which the market value of total capital is less than 85% of the book value of total capital; and
    - **Operational risk**, which represents 30% of the sum of our credit risk and market risk capital requirements.

The following table presents our risk-based capital requirement in relation to our permanent capital at December 31, 2023 and 2022 ($ amounts in millions).

Risk-Based Capital Components	December 31, 2023	December 31, 2022
Credit risk	$ 211	$ 203
Market risk	771	173
Operational risk	295	113
Total risk-based capital requirement	$ 1,277	$ 489
Permanent capital	$ 4,186	$ 3,783
Permanent capital as a percentage of required risk-based capital	328 %	773 %

The increase in our total risk-based capital requirement was primarily caused by an increase in the market risk component due to (i) changes in the stress scenarios provided by the Finance Agency including implementation of SOFR volatility shocks and the application of the SOFR discounting curve on derivatives and (ii) changes in the market environment, including changes in interest rates, CO-swap basis, volatility and option-adjusted spreads, and balance sheet composition. The operational risk component is calculated as 30% of the credit and market risk components. Despite these increases, our permanent capital at December 31, 2023 remained well in excess of our total risk-based capital requirement.

By regulation, the Finance Agency may mandate us to maintain a greater amount of permanent capital than is generally required by the risk-based capital requirements as defined, in order to promote safe and sound operations. In addition, a Finance Agency rule authorizes the Director to issue an order temporarily increasing the minimum capital level for an FHLBank if the Director determines that the current level is insufficient to address such FHLBank's risks. The rule sets forth several factors that the Director may consider in making this determination.

The Finance Agency has established four capital classifications for the FHLBanks - adequately capitalized, undercapitalized, significantly undercapitalized, and critically undercapitalized. The Finance Agency determines our capital classification on at least a quarterly basis. If we are determined to be other than adequately capitalized, we would become subject to additional supervisory authority by the Finance Agency. Before implementing a reclassification, the Finance Agency Director would be required to provide us with written notice of the proposed action and an opportunity to respond. The Finance Agency's most recent determination is that we hold sufficient capital to be adequately capitalized and meet both our minimum capital and risk-based capital requirements. For more information, see *Notes to Financial Statements - Note 12 - Capital*. For details of our off-balance-sheet commitments, see *Notes to Financial Statements - Note 17 - Commitments and Contingencies.*

Critical Accounting Estimates

The preparation of financial statements in accordance with GAAP requires management to make a number of judgments, estimates, and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities (if applicable), and the reported amounts of income and expenses. We review these estimates and assumptions based on historical experience, changes in business conditions and other relevant factors that we believe to be reasonable under the circumstances. Changes in certain estimates and assumptions have the potential to significantly affect our financial position and results of operations and, in any given reporting period, our actual results may differ from the estimates and assumptions used in preparing our financial statements.

We have identified one of our accounting estimates, the valuation of interest-rate related derivatives and hedged items, as critical because this particular estimate requires management to make a number of difficult, subjective, and/or complex judgments about matters that are inherently uncertain resulting in an increased likelihood that materially different amounts could be reported under different market conditions or when using different assumptions.

Valuation of Interest-Rate Related Derivatives and Hedged Items. The estimated fair values of our interest-rate related derivatives and hedged items are determined using standard valuation techniques such as discounted cash-flow analysis, which utilizes market estimates of interest rates and volatility, and comparisons to similar instruments. For the year ended December 31, 2023, the valuation techniques and assumptions used to derive the estimated fair values of these instruments were largely consistent with the prior year with the exception of changes that resulted from the transition from LIBOR to SOFR, which was not material.

Although our use of derivatives is meant to mitigate market risk, derivatives introduce the potential for earnings volatility. Specifically, a mismatch can exist between the timing of income and expense recognition from assets or liabilities and the income effects of derivative instruments positioned to mitigate the market risk associated with those assets or liabilities. Therefore, during periods of significant changes in interest rates and other market factors, our earnings may experience greater volatility. Despite substantially all of our derivatives qualifying for fair-value hedge accounting (i.e., the change in the estimated fair value of the hedged item is substantially offset by the change in the estimated fair value of the derivative in net interest income), due to the size of our hedging portfolio, even a small percentage of hedge ineffectiveness (i.e., any difference in the change in the estimated fair value of the derivative and hedged item attributable to the hedged risk) can have a notable impact on the Bank's reported earnings.

For additional information on the quantitative impact our qualifying and non-qualifying derivatives had on our reported earnings for the three years ended December 31, 2023, 2022, and 2021, see *Note 8 - Derivatives and Hedging Activities*.

To ensure the estimated fair values of our interest-rate related derivatives and hedged items are reliable, we have several controls and procedures in place including, but not limited to, the following:

- monitoring of hedge effectiveness results;
- comparison of our internally derived derivative values to the respective counterparty's value(s);
- benchmarking our values to those produced by an alternate model; and
- internal and periodic external validations of the valuation model and key assumptions.

Sensitivity of Estimate. While changes in estimated fair value can cause earnings volatility during the periods the derivative instruments are held, for hedges that qualify for fair-value hedge accounting, such changes do not have any net long-term economic effect or result in any net cash flows if the derivative and the hedged item are held to maturity. Since these estimated fair values eventually return to zero (or par value) on the maturity date, the effect of such fluctuations throughout the life of the hedging relationship is usually only a timing difference.

Over the past five years, the largest amount of net unrealized losses in any year on our qualifying fair-value hedge relationships was $(24) million.

Recent Accounting and Regulatory Developments

Accounting Developments. For a description of how recent accounting developments may impact our financial condition, results of operations or cash flows, see *Notes to Financial Statements - Note 2 - Recently Adopted and Issued Accounting Guidance*.

Legislative and Regulatory Developments. The following is a summary of significant regulatory actions and developments for the period covered by this report.

Finance Agency's Review and Analysis of the FHLBank System. Commencing in the fall of 2022, and over a period of several months, the Finance Agency undertook a review and analysis of the FHLBank System, in part through a series of public listening sessions, regional roundtable discussions, and receipt of comments from stakeholders and the public. This review covered such areas as the FHLBanks' mission and purpose in a changing marketplace; their organization, operational efficiency, and effectiveness; their role in promoting affordable, sustainable, equitable, and resilient housing and community investment; their role in addressing the unique needs of rural and financially vulnerable communities; member products, services, collateral requirements; and membership eligibility and requirements.

On November 7, 2023, the Finance Agency issued a written report titled "FHLBank System at 100: Focusing on the Future", presenting its review and analysis of the FHLBank System and the actions and recommendations that it plans to pursue in service of its vision for the future of the FHLBank System. The report focused on four broad themes: (i) the mission of the FHLBank System; (ii) the FHLBank System as a stable and reliable source of liquidity; (iii) housing and community development; and (iv) FHLBank System operational efficiency, structure, and governance. The Finance Agency has stated that it expects its initiative to continue as a multi-year, collaborative effort with the FHLBanks, their member institutions, and other stakeholders to address the recommended actions in the report and has also stated that it can implement some of the recommendations from the report through ongoing supervision, guidance, or rulemaking, as well as through statutory changes by proposing specific requests for Congressional action.

Among other things, the Finance Agency has indicated that it plans to:

- Update and clarify its regulatory statement of the FHLBanks' mission to explicitly incorporate its view of the core objectives of the FHLBanks' mission, which are (i) providing stable and reliable liquidity to members, and (ii) supporting housing and community development;
- Clarify the FHLBanks' liquidity role and take steps that the Finance Agency believes will better position the FHLBanks to perform their liquidity function, including enhancing Finance Agency oversight of FHLBank credit risk evaluation of their members and establishing protocols for large depository members to borrow from the Federal Reserve discount window;
- Expand the FHLBanks' housing and community development focus by requiring the establishment of mission-oriented collateral programs, re-evaluating the definition of long-term advances, exploring revisions to community support requirements, and reviewing the affordable housing programs, community investment programs, and community investment cash advance programs to encourage their greater use in a safe and sound manner. The Finance Agency will also recommend that Congress consider amending the Bank Act to at least double the statutory minimum required annual AHP contribution; and
- Review the FHLBanks' operational efficiencies through encouraging collaboration among the FHLBanks, evaluating the size and structure of FHLBank boards, considering the structure of FHLBank districts and composition of their membership, and studying whether realignment or consolidation are necessary for the efficiency of the FHLBank System.

We are not able to predict what actions will ultimately result from the Finance Agency's recommendations, the timing of these actions, the extent of any changes to us or the FHLBank System, or the ultimate impact on us or the FHLBank System in the future. We plan to continue to engage with the Finance Agency and other stakeholders to ensure that the FHLBank System remains well positioned to serve our members and their communities. For a further discussion of related risks, see *Part I. Item 1A. Risk Factors – Business Risks - Legislative and Regulatory*.

Federal Reserve Bank Term Funding Program. On March 12, 2023, in response to prevailing concerns about the ability of banks to meet the needs of all their depositors, the Federal Reserve announced the implementation of a Bank Term Funding Program ("BTFP"), as an additional source of liquidity for eligible borrowers, including any U.S. federally insured depository institution or U.S. branch or agency of a foreign bank that is eligible for primary credit with the Federal Reserve. The BTFP offers up to one-year term loans to be secured by eligible collateral owned by eligible borrowers as of March 12, 2023. Such loans can be requested until March 11, 2024. The BTFP is subject to $25 billion in credit protection by the U.S. Department of Treasury. On January 24, 2024, the Federal Reserve announced that the BTFP will cease making new loans as scheduled on March 11, 2024. The BTFP's terms are favorable and, as such, has been a source of competition with our advances.

CFPB Final Rule. On March 30, 2023, the CFPB issued a final rule requiring certain covered financial institutions to collect and report small business lending data. The rule defines small businesses as businesses with $5 million or less in gross annual revenue in the preceding fiscal year. We will be subject to data collection and reporting obligations if we have originated a minimum of 100 "covered credit transactions" to small businesses in each of the two preceding calendar years. The final rule implements phased-in compliance dates, beginning on October 1, 2024, based on the number of originations the covered financial institution makes to small businesses within a specified timeframe. We are assessing to what extent the obligations will be triggered for us. If they are, we believe that operational changes will be necessary for compliance, although we do not believe these changes will have a material effect on our financial condition or results of operations. However, under a federal court order in related litigation, the CFPB has been enjoined from implementing and enforcing the final rule, and all deadlines for compliance with the final rule have been stayed. Accordingly, we cannot predict when we will need to comply if we are subject to these obligations.

Finance Agency Proposed Rule on Fair Lending, Fair Housing, and Equitable Housing Finance Plans. On April 26, 2023, the Finance Agency published a proposed rule that specifies requirements related to FHLBank compliance with fair housing and fair lending laws and prohibitions on unfair or deceptive acts or practices. The fair housing and fair lending laws would be the Fair Housing Act, the Equal Credit Opportunity Act, and those acts' implementing regulations. Further, the proposed rule would outline the Finance Agency's enforcement authority. We will be subject to additional operational burdens in complying with the rule if it is adopted as proposed, but do not believe the rule will have a material effect on our financial condition or results of operations. We continue to evaluate its potential impact on us.

Office of the Comptroller of the Currency, Federal Reserve, and Federal Deposit Insurance Corporation Joint Proposed Rule to Revise Capital Requirements for Certain Large Banking Organizations. On September 18, 2023, the Office of the Comptroller of the Currency, the Board of Governors of the Federal Reserve, and the Federal Deposit Insurance Corporation published a joint notice of proposed rulemaking that would substantially revise the regulatory capital requirements applicable to certain large banking organizations and banking organizations with significant trading activity (Covered Banks), generally consistent with changes to international capital standards issued by the Basel Committee on Banking Supervision, known as Basel III. The proposed rulemaking will amend the calculation of risk-based capital requirements in an attempt to better reflect the risks of these banking organizations' exposures, reduce the complexity of the framework, enhance the consistency of requirements across these banking organizations, and facilitate more effective supervisory and market assessments of capital adequacy. For certain collateralized transactions under existing capital requirements, debt securities issued by a GSE such as the FHLBanks are afforded a lower market price volatility haircut than higher risk non-GSE investment-grade securities. The proposed rules would increase the market price volatility haircuts applicable to debt securities of the GSEs (including the FHLBanks) by applying to these debt securities the same haircuts as non-GSE investment-grade securities. We continue to evaluate the potential impact of the proposed rule on our financial condition and results of operation. The proposed change to market price volatility haircuts applicable to debt securities of the FHLBanks may harm liquidity for FHLBank debt securities in the market, impact general demand for FHLBank debt securities, and increase the FHLBanks' cost of funding due to potential higher interest rates as a result of the foregoing.

SEC Final Rule on the Enhancement and Standardization of Climate-Related Disclosures for Investors. On March 6, 2024, the SEC adopted a final rule that will require registrants to disclose certain climate-related information in annual reports. The final rule requires disclosure of, among other things: material climate-related risks and their material impacts; activities to mitigate or adapt to such risks; information about a registrant's board of directors' oversight of climate-related risks and management's role in managing material climate-related risks; and information on any climate-related targets or goals that are material to the registrant's business, results of operations, or financial condition. In addition, certain disclosures related to severe weather events and other natural conditions will be required in a registrant's audited financial statements. We will be subject to the applicable requirements of the rule in our annual reports for fiscal years beginning in 2027. We continue to review the final rule and evaluate its impact on us, including the effect on costs and complexities associated with our SEC reporting.

Risk Management

We have exposure to a number of risks in pursuing our business objectives. These risks may be broadly classified as market, credit, liquidity, operational, and business. Market risk is discussed in *Item 7A. Quantitative and Qualitative Disclosures about Market Risk*.

Active risk management is an integral part of our operations because these risks are an inherent part of our business activities. We manage these risks by, among other actions, setting and enforcing appropriate limits and developing and maintaining internal policies and processes to ensure an appropriate risk profile. In order to enhance our ability to manage Bank-wide risk, our enterprise risk management function is structured to segregate risk measurement, monitoring, and evaluation from our business units where risk-taking occurs through financial transactions and positions.

Effective risk management programs include not only conformance of specific risk management practices to certain risk-related compliance requirements established by the Finance Agency, but also the active involvement of our board of directors. Our board of directors has established a Risk Appetite Statement that summarizes the amounts, levels and types of enterprise-wide risk that our management is authorized to undertake in pursuit of achieving our mission and executing our strategic plans. The Risk Appetite Statement includes high level qualitative and quantitative risk limits and tolerances.

Our board of directors has also established a Risk Oversight Committee that provides focus, direction and accountability for our risk management process. Further, our Enterprise Risk Management Policy serves as a key policy to address our exposures to market, credit, liquidity, operational and business risks, and various other key risk-related policies approved by our board of directors address operational risk management, model risk management, credit, capital markets, and enterprise information security.

Our internal Risk Committee focuses exclusively on risk management, as it:

- oversees the identification, monitoring, measurement, evaluation and reporting of risks;
- promotes cross-functional communication and exchange of ideas pertaining to oversight of our risk profile in accordance with guidelines and objectives established by our board of directors and senior management;
- oversees the actions of the new Credit Subcommittee, which oversees the identification, monitoring, measurement, evaluation and reporting of enterprise-wide credit risks throughout the organization and is led by our new Chief Credit Risk Officer; and
- oversees the actions of the Information Security Steering Committee, which oversees our Information Security Program, which includes enterprise information security, cybersecurity, and physical security.

Each of our other internal management committees is responsible for overseeing its respective business activities in accordance with specified policies, in addition to ongoing consideration of pertinent risk-related issues.

Broadly, our enterprise risk management team leads the implementation of our enterprise risk management program and assists the board of directors by establishing, monitoring, and maintaining the program and seeking amendments and approvals of the risk management policies from time to time. Our Enterprise Risk Management Policy specifies that breaches of material risk limits from the risk management policies and program policies will be reported to the board of directors or a designated committee of the board, which committee is typically the board's Risk Oversight Committee.

Our Chief Risk Officer leads our enterprise risk management team, reports directly to our chief executive officer and provides reports directly to the board of directors or the Risk Oversight Committee. Our Enterprise Risk Management Policy specifies that the Chief Risk Officer:

- is independent while remaining a part of the management team;
- has unfettered access to the board of directors, including the Risk Oversight Committee, and senior management on key risk issues; and
- is empowered to obtain information deemed necessary to fulfill the responsibilities of the role.

We have a formal process for the assessment of Bank-wide risk and risk-related issues. Our risk assessment process is designed to identify and evaluate material risks, including both quantitative and qualitative aspects, which could adversely affect achievement of our financial performance objectives and compliance with applicable requirements. Business unit managers play a significant role in this process, as they are best positioned to identify and understand the risks inherent in their respective operations. These assessments evaluate the inherent risks within each of the key processes as well as the controls and strategies in place to manage those risks, identify primary weaknesses, and recommend actions that should be undertaken to address the identified weaknesses. The results of these assessments are summarized in an annual risk assessment report, which is reviewed by senior management and our board of directors.

Credit Risk Management. Credit risk is the risk that members or other counterparties may be unable to meet their contractual obligations to us, or that the values of those obligations will decline as a result of deterioration in the members' or other counterparties' creditworthiness. Credit risk arises when our funds are extended, committed, invested or otherwise exposed to risk of non-repayment. We face credit risk on advances and other credit products, investments, mortgage loans, derivative financial instruments, and AHP grants.

The most important step in the management of credit risk is the initial decision to extend credit. We also manage credit risk by following established policies, evaluating the creditworthiness of our members and counterparties, and utilizing collateral agreements and settlement netting. Periodic monitoring of members and other counterparties is performed whenever we are exposed to credit risk.

Advances and Other Credit Products. We manage our exposure to credit risk on advances primarily through a combination of our security interests in assets pledged by our borrowers and ongoing reviews of our borrowers' financial strength. Credit analyses are performed on existing borrowers, with the frequency and scope determined by the financial strength of the borrower and/or the amount of our credit products outstanding to that borrower. We establish limits and other requirements for advances and other credit products.

Section 10(a) of the Bank Act prohibits us from making an advance without sufficient collateral to fully secure the advance. Security is provided via thorough underwriting and perfecting our position in eligible assets pledged by the borrower as collateral before an advance is made. Each member's collateral reporting requirement is based on its collateral status, which reflects its financial condition and type of institution, and our review of conflicting liens, with our level of control over the collateral increasing when a member's financial performance deteriorates. We continually evaluate the quality and value of collateral pledged to support advances and work with members to improve the accuracy of valuations.

At December 31, 2023, advances outstanding to our insurance company members represented 38% of our total advances outstanding, at par. The significant level of advances to insurance company members reflect the significant portion of total financial assets held by insurance companies in our district. Insurance companies have different risk characteristics than our depository members. Some of the ways we mitigate this risk include requiring insurance companies to deliver collateral to us or our custodian and using industry-specific underwriting approaches as part of our ongoing evaluation of our insurance company members' financial strength.

Borrowing Limits. Generally, we maintain a credit products borrowing limit of 40% of a depository member's total assets. As of December 31, 2023, we had no advances outstanding to a depository member whose total credit products exceeded 40% of its total assets.

The borrowing limit for our insurance company members is 25% of their total general account assets. As of December 31, 2023, we had no advances outstanding to an insurance company member whose total credit products exceeded 25% of their general account assets.

The credit products borrowing limit for our non-depository CDFI members is 25% of their total assets. As of December 31, 2023, we had no advances outstanding to a non-depository CDFI member whose total credit products exceeded 25% of their total assets.

Any credit extensions to a member whose total credit products exceed the applicable threshold require an additional approval as provided in our credit policy. The approval is based upon a number of factors that may include the member's financial condition, collateral quality, business plan and earnings stability. We also monitor these members more closely on an ongoing basis. We may impose additional restrictions on extensions of credit to our members at our discretion.

Concentration. Our credit risk is magnified due to the concentration of advances in a few borrowers. As of December 31, 2023, our top borrower held 12% of total advances outstanding, at par, and our top five borrowers held 35% of total advances outstanding, at par. The following tables present the par value of advances outstanding to our largest borrowers ($ amounts in millions).

	December 31, 2023	
Borrower	**Amount**	**% of Total**
Old National Bank	$ 4,300	12 %
The Lincoln National Life Insurance Company	2,650	8 %
Jackson National Life Insurance Company	2,252	6 %
First National Bank of America	1,880	5 %
Forethought Life Insurance Company	1,565	4 %
Subtotal - five largest borrowers	12,647	35 %
Next five largest borrowers	6,677	19 %
Remaining borrowers	16,553	46 %
Total advances, par value	$ 35,877	100 %

Because of this concentration in advances, we perform frequent credit and collateral reviews on our largest borrowers. In addition, we regularly analyze the implications to our financial management and profitability if we were to lose the business of one or more of these borrowers.

At our discretion, and provided the borrower meets our contractual requirements, advances to borrowers that are no longer members may remain outstanding until maturity, subject to certain regulatory requirements.

For the years ended December 31, 2023, 2022 and 2021, we did not have gross interest income on advances, excluding the effects of interest-rate swaps, from any one borrower that exceeded 10% of our total interest income.

Collateral Requirements. We generally require all borrowers to execute a security agreement that grants us a blanket lien on substantially all assets of the member. Our agreements with borrowers require each borrowing entity to fully secure all outstanding extensions of credit at all times, including advances, accrued interest receivable, standby letters of credit, correspondent services, certain AHP transactions, and all indebtedness, liabilities or obligations arising or incurred as a result of a member transacting business with us. We may also require a member to pledge additional collateral to cover exposure resulting from any applicable prepayment fees on advances.

In accordance with the Bank Act, we accept the following assets as collateral:

- fully disbursed, whole first mortgages on improved residential property, or securities representing a whole interest in such mortgages;
- securities issued, insured, or guaranteed by the United States government or any Agency thereof (including, without limitation, MBS issued or guaranteed by Fannie Mae, Freddie Mac, or Ginnie Mae);
- cash or deposits in an FHLBank; and
- other real estate-related collateral acceptable to us if such collateral has a readily ascertainable value and we can perfect our interest in the collateral.

Additionally, for any CFI, we may also accept secured loans for small business, agricultural and community development activities.

In addition to our internal credit risk management policies and procedures, Section 10(e) of the Bank Act affords priority of any security interest granted to us, by a member or such member's affiliate, over the claims or rights of any other party, including any receiver, conservator, trustee, or similar entity that has the rights of a lien creditor, except for claims held by bona fide purchasers for value or by parties that are secured by prior perfected security interests, provided that such claims would otherwise be entitled to priority under applicable law. Moreover, with respect to federally-insured depository institution borrowers, our claims are given certain preferences pursuant to the receivership provisions of the Federal Deposit Insurance Act. With respect to insurance company members, however, Congress provided in the McCarran-Ferguson Act of 1945 that state law generally governs the regulation of insurance and shall not be preempted by federal law unless the federal law expressly regulates the business of insurance. Thus, if a court were to determine that the priority provision of Section 10(e) of the Bank Act conflicts with state insurance law applicable to our insurance company members, the court might then determine that the priority of our security interest would be governed by state law, not Section 10(e). Under these circumstances, the "super lien" priority protection afforded to our security interest under Section 10(e) may not fully apply when we lend to such insurance company members. However, we monitor applicable states' laws, and our security interests in collateral posted by insurance company members have express statutory protections in the jurisdictions where our members are domiciled. In addition, we take all necessary action under applicable state law to obtain and maintain a prior perfected security interest in the collateral, including by taking possession or control of the collateral as appropriate.

Collateral Status. When an institution becomes a member, we assign the member to a collateral status after the initial underwriting review. The assignment of a member to a collateral status category reflects, in part, our philosophy of increasing our level of control over the collateral pledged by the member, when warranted, based on our underwriting conclusions and a review of our lien priority. Some members pledge and report collateral under a blanket lien established through the security agreement, while others are placed on specific listings or possession status or a combination of the three via a hybrid status. We take possession of all collateral posted by insurance companies to further ensure our position as a first-priority secured creditor. A depository institution member may elect a more restrictive collateral status to receive a higher lendable value for their collateral.

The primary features of these three collateral status categories are:

Blanket:

- only certain financially sound depository institutions are eligible;
- institutions that have granted a blanket lien to another creditor may be eligible if an inter-creditor or subordination agreement is executed;
- review and approval by underwriting and collateral operations management is required;
- member retains possession of eligible whole loan collateral pledged to us;
- member executes a written security agreement and agrees to hold such collateral for our benefit; and
- member provides periodic reports of all eligible collateral.

Specific Listings:

- applicable to depository institutions that demonstrate potential weakness in their financial condition or seek lower over-collateralization requirements;
- may be available to institutions that have granted a blanket lien to another creditor if an inter-creditor or subordination agreement is executed;
- member retains possession of eligible whole loan collateral pledged to us;
- member executes a written security agreement and agrees to hold such collateral for our benefit; and
- member provides loan level detail on the pledged collateral on at least a monthly basis.

Possession:

- applicable to all insurance companies, non-depository CDFI's, Housing Associates, and those depository institutions demonstrating less financial strength than those approved for specific listings;
- required for all de novo institutions and institutions that have granted a blanket lien to another creditor but have not executed an inter-creditor or subordination agreement;
- safekeeping for securities pledged as collateral can be with us or a third-party custodian that we have pre-approved;
- original notes and other documents related to whole loans pledged as collateral are held with a third-party custodian that we have pre-approved;
- member executes a written security agreement; and
- member provides loan level detail on the pledged collateral on at least a monthly basis.

Collateral Valuation. In order to mitigate the market, credit, liquidity, operational and business risk associated with collateral, we apply an over-collateralization requirement to the book value or market value of pledged collateral to establish its lendable value. Collateral that we have determined to contain a low level of risk, such as United States government obligations, is over-collateralized at a lower rate than collateral that carries a higher level of risk, such as small business loans. The over-collateralization requirement applied to asset classes may vary depending on collateral status, because lower requirements are applied as our levels of information and control over the assets increase.

We have made changes to, and continue to update, our internal valuation model to gain greater consistency between model-generated valuations and observed market prices, resulting in adjustments to lendable values on whole loan collateral. We routinely engage outside pricing vendors to benchmark our modeled pricing on residential and commercial real estate collateral, and we modify valuations where appropriate.

The following table provides information regarding credit products outstanding with borrowers based on their reporting status, along with their corresponding collateral balances at December 31, 2023. The table only lists collateral that was identified and pledged by borrowers with outstanding credit products, and therefore does not include all assets against which we have security interests ($ amounts in millions).

		Collateral Types					
Collateral Status	**# of Borrowers**	**1st lien Residential**	**Other Real Estate Related-Collateral/ CFI**	**Securities/ Delivery**	**Total Collateral**	**Lendable Value [1]**	**Credit Outstanding [2]**
Blanket	91	$ 22,333	$ 16,673	$ 5,890	$ 44,896	$ 29,343	$ 11,419
Specific listings	80	29,018	5,909	5,974	40,901	29,120	9,242
Possession	30	6,582	12,965	9,344	28,891	18,986	13,657
Hybrid [3]	3	5,266	581	59	5,906	4,143	2,071
Total	204	$ 63,199	$ 36,128	$ 21,267	$ 120,594	$ 81,592	$ 36,389

(1) Lendable Value is the borrowing capacity, based upon collateral pledged after a market value has been estimated (excluding blanket-pledged collateral) and an over-collateralization requirement has been applied.
(2) Credit outstanding includes advances (at par value), lines of credit used, and standby letters of credit.
(3) Hybrid collateral status is a combination of any of the others: blanket, specific listings and possession.

Collateral Review and Monitoring. Our agreements with borrowers allow us, at any time and in our sole discretion, to require substitution of collateral, adjust the over-collateralization requirements applied to collateral, or refuse to make extensions of credit against any collateral. We also may require borrowers to pledge additional collateral regardless of whether the collateral would be eligible to originate a new extension of credit. Our agreements with our borrowers also afford us the right, in our sole discretion, to declare any borrower to be in default if we deem the Bank to be inadequately secured.

Underwriting and collateral operations management continually monitors members' collateral status and may require a member to change its collateral status based upon deteriorating financial performance, results of collateral verification reviews, or a high level of borrowings as a percentage of its assets. The blanket lien created by the security agreement remains in place regardless of a member's collateral status.

We conduct regular collateral verification reviews of loan collateral pledged by members to confirm the existence of the pledged collateral, confirm that the collateral conforms to our eligibility requirements, and score the collateral for concentration and credit risk. Based on the results of such collateral verification reviews, a member may have its over-collateralization requirements adjusted, limitations may be placed on the amount of certain asset types accepted as collateral or, in some cases, the member may be changed to a more stringent collateral status. We may conduct a review of any borrower's collateral at any time.

Credit Review and Monitoring. We monitor the financial condition of all member and non-member borrowers by reviewing certain available financial data, such as regulatory call reports filed by depository institution borrowers, regulatory financial statements filed with the appropriate state insurance department by insurance company borrowers, SEC filings, and rating agency reports, to ensure that potentially troubled institutions are identified as soon as possible. In addition, we have the ability to obtain borrowers' regulatory examination reports and, when appropriate, may contact borrowers' management teams to discuss performance and business strategies. We analyze this information on a regular basis and use it to determine the appropriate collateral status for our borrowers.

We use models to assign a quarterly financial performance measure for all depository and insurance borrowers. This measure, combined with other credit monitoring tools and the level of a member's usage of credit products, determines the frequency and depth of underwriting analysis for depository borrowers. The frequency and depth of underwriting analysis is the same for all insurance borrowers.

Investments. We are also exposed to credit risk through our investment portfolio. Our policies restrict the acquisition of investments to high-quality, short-term money market instruments and high-quality long-term securities.

Short-Term Investments. Our short-term investments typically include securities purchased under agreements to resell, which are secured by United States Treasuries. Although we are permitted to purchase these securities for terms of up to 275 days, most mature overnight. Our short-term investments can also include federal funds sold, which can be overnight or term placements of our funds. We place these funds with large, high-quality financial institutions with investment-grade long-term credit ratings on an unsecured basis for terms of up to 275 days, though most mature overnight. Our short-term investments also include interest-bearing demand deposit accounts which are commercial deposit accounts generally opened with large, high-quality domestic financial institutions. The funds within these accounts are available for withdrawal at any time during business hours.

We monitor counterparty creditworthiness, ratings, performance, and capital adequacy in an effort to mitigate unsecured credit risk on the short-term investments, with an emphasis on the potential impacts of changes in global economic conditions. As a result, we may limit or suspend exposure to certain counterparties.

Finance Agency regulations include limits on the amount of unsecured credit we may extend to a private counterparty or to a group of affiliated counterparties. These regulations require, among other things, that we calculate credit risk capital charges and unsecured credit limits based on our own internal rating methodology.

Finance Agency regulations also permit us to extend additional unsecured credit for overnight federal funds sold up to a total unsecured exposure to a single counterparty of 2% to 30% of the eligible amount of regulatory capital, based on our internal credit rating of the counterparty.

Additionally, we are prohibited by Finance Agency regulation from investing in financial instruments issued by non-United States entities other than those issued by United States branches and agency offices of foreign commercial banks. Our unsecured credit exposures to United States branches and agency offices of foreign commercial banks include the risk that, as a result of political or economic conditions in a country, the counterparty may be unable to meet its contractual repayment obligations. During the year ended December 31, 2023, our unsecured investment credit exposure to United States branches and agency offices of foreign commercial banks was limited to federal funds sold. Our unsecured credit exposures to domestic counterparties and United States subsidiaries of foreign commercial banks include the risk that these counterparties have extended credit to foreign counterparties.

The following table presents the unsecured investment credit exposure to private counterparties, categorized by the domicile of the counterparty's ultimate parent, based on the lowest of the counterparty's NRSRO long-term credit ratings, stated in terms of the S&P equivalent. The table does not reflect the foreign sovereign government's credit rating ($ amounts in millions).

	December 31, 2023		
Country	**AA**	**A**	**Total**
Domestic	$ —	$ 2,474	$ 2,474
Australia	1,300	—	1,300
Canada	—	919	919
Netherlands	—	300	300
Total unsecured credit exposure	$ 1,300	$ 3,693	$ 4,993

Trading Securities. Our liquidity portfolio includes shorter-term U.S. Treasury obligations, which are direct obligations of the U.S. government and are classified as trading securities.

Other Investment Securities. Our long-term investments include MBS guaranteed by the housing GSEs (Fannie Mae and Freddie Mac), other U.S. obligations - guaranteed MBS (Ginnie Mae), longer-term U.S. Treasury obligations, and debentures issued by Fannie Mae, Freddie Mac, the TVA and the Federal Farm Credit Banks.

A Finance Agency regulation provides that the total amount of our investments in MBS, calculated using amortized historical cost excluding the impact of certain derivatives adjustments, must not exceed 300% of our total regulatory capital, as of the day we purchase the securities, based on the capital amount most recently reported to the Finance Agency. If our outstanding investments in MBS exceed the limitation at any time, but were in compliance at the time we purchased the investments, we would not be considered out of compliance with the regulation, but we would not be permitted to purchase additional investments in MBS until these outstanding investments were within the limitation. Generally, our goal is to maintain investments in MBS near the 300% regulatory limit in order to enhance earnings and capital for our members and diversify our revenue stream. At December 31, 2023, these investments totaled 300% of total regulatory capital. As a result, the opportunity to further enhance our earnings by purchasing MBS was not available until our ratio fell below 300% during the first quarter of 2024.

The following table presents the carrying values of our investments, excluding accrued interest, grouped by credit rating and investment category. Applicable rating levels are determined using the lowest relevant long-term rating from S&P and Moody's, each stated in terms of the S&P equivalent. Rating modifiers are ignored when determining the applicable rating level for a given counterparty. Amounts reported do not reflect any subsequent changes in ratings, outlook, or watch status ($ amounts in millions).

	December 31, 2023			
Investment	**AA**	**A**	**Unrated** [(1)]	**Total**
Short-term investments:				
Interest-bearing deposits	$ —	$ 892	$ —	$ 892
Securities purchased under agreements to resell	3,500	2,600	400	6,500
Federal funds sold	1,300	2,801	—	4,101
Total short-term investments	4,800	6,293	400	11,493
Trading securities:				
U.S. Treasury obligations	600	—	—	600
Total trading securities	600	—	—	600
Other investment securities:				
U.S. Treasury obligations	5,697	—	—	5,697
GSE and TVA debentures	1,807	—	—	1,807
GSE MBS	7,937	—	—	7,937
Other U.S. obligations - guaranteed residential MBS	4,010	—	—	4,010
Total other investment securities	19,451	—	—	19,451
Total investments, carrying value	$ 24,851	$ 6,293	$ 400	$ 31,544
Percentage of total	79 %	20 %	1 %	100 %

(1) Although the counterparty is unrated, the underlying collateral supporting these investments are U.S. Treasury obligations with a rating of AA.

Mortgage Loans Held for Portfolio. We are exposed to credit risk on the loans purchased from our PFIs through the MPP. Each loan we purchase must meet the guidelines for our MPP or be specifically approved as an exception based on compensating factors. For example, the maximum LTV ratio for any conventional mortgage loan purchased is 95%, and the borrowers must meet certain minimum credit scores depending upon the type of loan or property.

Credit enhancements for conventional loans include (in order of priority):

- PMI (when applicable);
- LRA; and
- SMI (as applicable) purchased by the seller from a third-party provider naming us as the beneficiary.

PMI. For a conventional loan, PMI, if applicable, covers losses or exposure down to approximately an LTV ratio between 65% and 80% based upon the original appraisal, original LTV ratio, term, and amount of PMI coverage. As of December 31, 2023, we had PMI coverage on $1.1 billion or 14% of our conventional MPP mortgage loans, which included coverage of $0.3 million on seriously delinquent loans, i.e., 90 days or more past due or in the process of foreclosure, of $1.4 million.

LRA. The following table presents the changes in the LRA ($ amounts in millions).

LRA Activity	**2023**
Liability, beginning of year	$ 235
Additions	19
Claims paid	—
Distributions to PFIs	(11)
Liability, end of year	$ 243

SMI. Losses that exceed available LRA funds are covered by SMI (for original MPP loans) up to a severity of approximately 50% of the original property value of the loan, depending on the SMI contract terms. We absorb any losses in excess of available LRA funds and SMI.

Our current SMI providers are Mortgage Guaranty Insurance Corporation and Enact Mortgage Insurance (formerly known as Genworth Mortgage Insurance Corporation). For pools of loans acquired under the original MPP, we entered into the insurance contracts directly with the SMI providers, including a contract for each pool or aggregate pool. Pursuant to Finance Agency regulation, the PFI must be responsible for all expected credit losses on the mortgages sold to us. Therefore, the PFI was the purchaser of the SMI policy, and we are designated as the beneficiary. The premiums are the PFI's obligation. As an administrative convenience, we collect the SMI premiums from the monthly mortgage remittances received from the PFIs or their designated servicer and remit them to the SMI provider.

As of December 31, 2023, we were the beneficiary of SMI coverage, under our original MPP, on conventional mortgage pools with a total UPB of $200 million. The lowest credit rating from S&P and Moody's, stated in terms of the S&P equivalent, for each of our SMI companies is BBB+. We evaluate the recoverability related to PMI and SMI for mortgage loans that we hold, including insurance companies placed under enhanced supervision of state regulators. We also evaluate the recoverability of outstanding receivables from our PMI and SMI providers related to outstanding and unpaid claims.

Mortgage Loan Characteristics. Two indicators of credit quality at origination are LTV ratios and credit scores provided by FICO®. FICO® provides a commonly used measure to assess a borrower's credit quality, with scores ranging from a low of 300 to a high of 850. The combination of a lower FICO® score and a higher LTV ratio is a key driver of potential mortgage delinquencies and defaults.

The following tables present these two characteristics at origination of our conventional loan portfolio as a percentage of the UPB outstanding ($ amounts in millions).

	December 31, 2023				
		% of UPB Outstanding			
FICO® SCORE [1]	**UPB**	**Current**	**Past Due 30-59 Days**	**Past Due 60-89 Days**	**Past Due 90 Days or More**
619 or less	$ 1	89.8 %	10.2 %	— %	— %
620-659	21	91.8 %	5.8 %	1.5 %	0.9 %
660-699	645	97.5 %	2.0 %	0.3 %	0.2 %
700-739	1,739	98.7 %	0.9 %	0.2 %	0.2 %
740 or higher	5,892	99.7 %	0.3 %	— %	— %
Total	$ 8,298	99.3 %	0.5 %	0.1 %	0.1 %

(1) Represents the FICO® score at origination of the lowest scoring borrower for the related loan.

For borrowers in our conventional loan portfolio at December 31, 2023, 99.7% of the borrowers had FICO® scores greater than 660 at origination and the weighted average FICO® score at origination was 760.

LTV Ratio [1]	**December 31, 2023**
< = 60%	16 %
> 60% to 70%	15 %
> 70% to 80%	50 %
> 80% to 90% [2]	14 %
> 90% [2]	5 %
Total	100 %

(1) At origination.
(2) These conventional loans were required to have PMI at origination.

For borrowers in our conventional loan portfolio at December 31, 2023, 81% of the borrowers had an LTV ratio of 80% or lower at origination and the weighted average LTV ratio at origination was 73%.

We believe these two measures indicate that these loans have a low risk of default.

Mortgage Loan Concentration. During 2023, our top-selling PFI sold us mortgage loans totaling $422 million, or 26% of the total mortgage loans that we purchased in 2023. Our five top-selling PFIs sold us 53% of the total. Because of this concentration, we regularly analyze the implications to our financial management and profitability if we were to lose the business of one or more of these sellers.

For the years ended December 31, 2023, 2022, and 2021, no aggregate mortgage loans outstanding previously purchased from any one PFI contributed interest income that exceeded 10% of our total interest income.

The properties underlying the mortgage loans in our portfolio are dispersed across 50 states, the District of Columbia and the Virgin Islands, with concentrations in Michigan and Indiana, the two states in our district. The following table presents the percentage of UPB of conventional loans outstanding at December 31, 2023 for the five largest state concentrations.

State	December 31, 2023
Indiana	42 %
Michigan	34 %
California	3 %
Kentucky	2 %
Florida	2 %
All others	17 %
Total	100 %

Mortgage Loan Credit Performance. The credit ratios of our mortgage loans are presented in the table below along with the amounts used in those calculations ($ amounts in millions).

	December 31,	
Metrics and Ratios	2023	2022
Average loans outstanding during the year ended (UPB)	$ 7,860	$ 7,517
Mortgage loans held for portfolio (UPB)	8,453	7,533
Non-accrual loans (UPB) (1)	8	11
Allowance for credit losses on mortgage loans held for portfolio	(0.1)	(0.2)
Net recoveries during the year ended	(0.1)	(0.1)
Ratio of net charge-offs to average loans outstanding during the year ended (2)	— %	— %
Ratio of allowance for credit losses to mortgage loans held for portfolio (2)	— %	— %
Ratio of non-accrual loans to mortgage loans held for portfolio	0.09 %	0.15 %
Ratio of allowance for credit losses to non-accrual loans	1.66 %	1.82 %

(1) Non-accrual loans are defined as conventional mortgage loans where either (i) the collection of interest or principal is doubtful, or (ii) interest or principal is past due for 90 days or more, except when the loan is well secured and in the process of collection (e.g., through credit enhancements and monthly servicer remittances on a scheduled/scheduled basis).

(2) Ratios of —% represent results less than 0.1%.

The serious delinquency rate for conventional mortgages was 0.08% at December 31, 2023, compared to 0.16% at December 31, 2022. The serious delinquency rate for government-guaranteed or -insured mortgages was 0.64% at December 31, 2023, compared to 1.07% at December 31, 2022. We rely on insurance provided by the FHA, which generally provides coverage for 100% of the principal balance of the underlying mortgage loan and defaulted interest at the debenture rate. However, we would receive defaulted interest at the contractual rate from the servicer. Both rates were below the national serious delinquency rate.

We establish credit enhancements in each mortgage pool purchased under our original MPP at the time of the pool's origination that are sufficient to absorb loan losses up to approximately 50% of the property's original value (subject, in certain cases, to an aggregate stop-loss provision in the SMI policy).

Derivatives. Our over-the-counter derivative transactions are either (i) entered into directly with a counterparty (uncleared derivatives) or (ii) cleared through a Futures Commission Merchant (i.e., clearing agent) with a Clearinghouse (cleared derivatives).

- *Uncleared Derivatives.* We are subject to credit risk due to the potential non-performance by the counterparties to our uncleared derivative transactions. We require collateral agreements with our uncleared derivative counterparties. The exposure thresholds above which collateral must be delivered vary; the threshold is zero in most cases.
- *Cleared Derivatives.* We are subject to credit risk due to the potential non-performance by the Clearinghouse and clearing agent because we are required to post initial and variation margin through the clearing agent, on behalf of the Clearinghouse, which exposes us to institutional credit risk if either the clearing agent or the Clearinghouse fails to meet its obligations. Collateral is required to be posted daily for changes in the value of cleared derivatives to mitigate each counterparty's credit risk.

The contractual or notional amount of derivative transactions reflects the extent of our participation in the various classes of financial instruments. Our credit risk with respect to derivative transactions is the estimated cost of replacing the derivative positions if there is a default, minus the value of any related collateral. In determining credit risk, we consider accrued interest receivables and payables as well as the requirements to net assets and liabilities. For more information, see *Notes to Financial Statements - Note 8 - Derivatives and Hedging Activities*.

The following table presents key information on derivative positions with counterparties on a settlement date basis using the lower credit rating from S&P and Moody's, stated in terms of the S&P equivalent ($ amounts in millions).

	December 31, 2023			
Counterparty and Credit Rating	**Notional Amount**	**Net Estimated Fair Value Before Collateral**	**Cash Collateral Pledged To (From) Counterparty**	**Net Credit Exposure**
Non-member counterparties:				
Asset positions with credit exposure				
Uncleared derivatives - A	$ 597	$ 3	$ (3)	$ —
Liability positions with credit exposure				
Uncleared derivatives - A	25,324	(380)	388	8
Cleared derivatives [1]	26,867	(10)	523	513
Total derivative positions with credit exposure to non-member counterparties	52,788	(387)	908	521
Total derivative positions with credit exposure to member institutions [2]	47	—	—	—
Subtotal - derivative positions with credit exposure	52,835	$ (387)	$ 908	$ 521
Derivative positions without credit exposure	24,037			
Total derivative positions	$ 76,872			

(1) Represents derivative transactions cleared by two Clearinghouses, each rated AA- .
(2) Includes MDCs from member institutions under our MPP.

AHP. Our AHP requires members and project sponsors to make commitments with respect to the usage of the AHP grants to assist very low-, low-, and moderate-income families, as defined by regulation. If these commitments are not met, we may have an obligation to recapture these funds from the member or project sponsor to replenish the AHP fund. This credit exposure is addressed in part by evaluating project feasibility at the time of an award and the member's ongoing monitoring of AHP projects.

Liquidity Risk Management. The primary objectives of liquidity risk management are to maintain the ability to meet obligations as they come due and to meet the credit needs of our member borrowers in a timely and cost-efficient manner. We routinely monitor the sources of cash available to meet liquidity needs and use various tests and guidelines to manage our liquidity risk.

Daily projections of required liquidity are prepared to help us maintain adequate funding for our operations. Operational liquidity levels are determined assuming sources of cash from both the FHLBank System's ongoing access to the capital markets and our holding of liquid assets to meet operational requirements in the normal course of business. Contingent liquidity levels are determined based upon the assumption of an inability to readily access the capital markets for a period of 20 calendar days. These analyses include projections of cash flows and funding needs, targeted funding terms, and various funding alternatives for achieving those terms. A contingency plan allows us to maintain sufficient liquidity in the event of operational disruptions at our Bank, at the Office of Finance, or in the capital markets.

For more information on liquidity management, see *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Liquidity*.

Operational Risk Management. Operational risk is the risk of loss resulting from inadequate or failed internal processes, people, and systems, or from external events. Our management has established policies, procedures, and controls and acquired insurance coverage to mitigate operational risk. Our Internal Audit department, which reports directly to the Audit Committee of the board of directors, regularly monitors our adherence to established policies, procedures, applicable regulatory requirements and best practices.

Our enterprise risk management function and business units complete a comprehensive annual risk and control self-assessment that reinforces our focus on maintaining strong internal controls by identifying significant inherent risks and the mitigating internal controls in order for the residual risks to be assessed and the appropriate strategy designed to accept, transfer, avoid or mitigate such risks. The risk assessment process provides management and the board of directors with a detailed and transparent view of our identified risks and related internal control structure.

We use various financial models to quantify financial risks and analyze potential strategies. We maintain a model risk management program that includes a validation process intended to mitigate the risk of loss resulting from model errors or the incorrect use or application of model output, which could potentially lead to inappropriate business or operational decisions.

Our operations rely on the secure processing, storage and transmission of sensitive/confidential and other information in our computer systems, software and networks. As a result, our Information Security Program is designed to protect our information assets, information systems and sensitive data from internal, external, vendor and third party cyber risks, including due diligence, risk assessments, and ongoing monitoring of critical vendors by our Vendor Management Office. The Information Security Program includes processes for monitoring existing, emerging and imminent threats as well as cyber attacks impacting our industry in order to develop appropriate risk management strategies. Information Security controls designed to protect and detect are in place, including procedures to respond to and mitigate the impacts of security incidents. For more information, see *Item 1C. Cybersecurity*.

In order to ensure our ongoing ability to provide liquidity and service to our members, we have business continuity plans designed to restore critical business processes and systems in the event of a business interruption. We operate both a business resumption center and a disaster recovery data center, at separate locations, with the objective of being able to fully recover all critical activities in a timely manner. Both facilities are subject to periodic testing to demonstrate the Bank's resiliency in the event of a disaster. In addition, all Bank staff have the capabilities to work remotely. We also have a back-up agreement in place with the FHLBank of Cincinnati in the event critical business operations at our primary and back-up facilities are inoperable.

We have insurance coverage for cybersecurity, employee fraud, forgery and wrongdoing, as well as Directors' and Officers' liability coverage that provides protection for claims alleging breach of duty, misappropriation of funds, neglect, acts of omission, employment practices, and fiduciary liability. We also have property, casualty, computer equipment, automobile, and other various types of insurance coverage. We complete periodic reviews to ensure the Bank maintains all insurance coverages at commercially appropriate levels.

Business Risk Management. Business risk is the risk of an adverse impact on our profitability and financial condition resulting from external factors that may occur in both the short and long term. Business risk includes economic, political, strategic, reputation, legislative and regulatory developments or events that are beyond our control. Examples of external factors may include, but are not limited to: continued financial services industry consolidation, a declining membership base, changes in the mix and/or concentration of borrowing among members, the introduction of new competing products and services, increased non-bank competition, enhanced liquidity at member institutions due to governmental programs, weakening of the FHLBank System's GSE status, changes in the deposit and mortgage markets for the Bank's members, changes that could occur as a result of new legislation, and other factors that may have a significant direct or indirect impact on our ability to achieve our mission and strategic objectives. Our board of directors and management seek to mitigate these risks by, among other actions, maintaining an open and constructive dialogue with regulators, providing input on potential legislation, conducting long-term strategic planning and continually monitoring general economic conditions and the external environment.

ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Market risk is the risk that the market value or estimated fair value of our overall portfolio of assets and liabilities, including derivatives, or our net earnings will decline as a result of changes in interest rates or financial market volatility. Market risk includes the risks related to:

- movements in interest rates over time;
- changes in mortgage prepayment speeds over time;
- advance prepayments;
- actual and implied interest-rate volatility;
- the change in the relationship between short-term and long-term interest rates (i.e., the slope of the consolidated obligation yield curve);
- the change in the relationship of FHLBank System debt spreads to relevant indices (commonly referred to as "basis" risk); and
- the change in the relationship between fixed rates and variable rates.

The goal of market risk management is to preserve our financial strength at all times, including during periods of significant market volatility and across a wide range of possible interest-rate scenarios. We regularly assess our exposure to changes in interest rates using a diverse set of analyses and measures. As appropriate, we may rebalance our portfolio to help attain our risk management objectives.

Our general approach toward managing interest-rate risk is to acquire and maintain a portfolio of assets and liabilities that, together with their associated hedges, limit our expected interest-rate sensitivity to within our specified tolerances. Additionally, in order to manage the exposure to mortgage contraction (prepayment) and extension risk, the outstanding balance of mortgage loans is limited to a proportion of total assets and the total amount of our investments in MBS must not exceed 300% of our total regulatory capital on the day of purchase. Derivative financial instruments, primarily interest-rate swaps, are frequently employed to hedge the interest-rate risk and/or embedded option risk on advances, debt, GSE debentures and Agency MBS held as investments.

The prepayment option on an advance can create interest-rate risk. If a member prepays an advance, we could suffer lower future income if the principal portion of the prepaid advance is reinvested in lower yielding assets that continue to be funded by higher cost debt. To protect against this risk, we charge a prepayment fee, thereby substantially reducing market risk associated with the prepayment of an advance.

We have significant investments in mortgage loans and MBS. The prepayment options embedded in mortgages can result in extensions or contractions in the expected weighted average life of these investments, depending on changes in interest rates and other economic factors. We primarily manage the interest-rate and prepayment risk associated with mortgages through debt issuance, which includes both callable and non-callable debt, to achieve cash-flow patterns and liability durations similar to those expected on the mortgage portfolios. Due to the use of call options and lockouts, and by selecting appropriate maturity sectors, callable debt provides an element of protection for the prepayment risk in the mortgage portfolios. The average life of callable debt, like that of a mortgage, shortens when interest rates decrease and lengthens when interest rates increase.

Significant resources, including analytical computer models and an experienced professional staff, are devoted to properly measuring the level of interest-rate risk in the balance sheet, thus allowing us to monitor the risk against policy and regulatory limits. We use asset and liability models to calculate market values under alternative interest-rate scenarios. The models analyze our financial instruments, including derivatives, using broadly accepted algorithms with consistent and appropriate behavioral assumptions, market prices, market data (such as rates, volatility, etc.) and current position data. On at least an annual basis, we review the major assumptions and methodologies used in the models, including discounting curves, spreads for discounting, and prepayment assumptions.

Types of Key Market Risks

Our market risk results from various factors, such as:

- **Interest Rates** - level of interest rates and parallel and non-parallel shifts in the yield curve;
- **Basis Risk** - the risk that changes to one interest-rate index will not perfectly offset changes to another interest-rate index;
- **Volatility** - varying values of assets or liabilities created by the changing expectations of the magnitude or frequency of changes in interest rates;
- **Embedded Options** - includes consideration of potential variability in the cash flows of financial instruments (i.e., advances, investments or derivatives) resulting from any options embedded in the instruments, such as prepayment options in mortgages and callable bonds; and
- **Prepayment Speeds** - expected levels of principal payments on mortgage loans held in a portfolio or supporting an MBS, variations from which alter their cash flows, yields, and values, particularly in cases where the loans or MBS are acquired at a premium or discount.

Measuring Market Risks

To evaluate market risk, we utilize multiple risk measurements, including Value-at-Risk ("VaR"), duration of equity, convexity, changes in MVE, duration gap, and earnings at risk. Periodically, we conduct stress tests to measure and analyze the effects that extreme movements in the level of interest rates and the shape of the yield curve would have on our risk position.

Market Risk-Based Capital Requirement. The market risk-based capital requirement is an estimate of the market value decline of the portfolio at risk from movements in interest rates and other factors that could occur during times of market stress. We use an internal, VaR-based model to make the estimate. The model:

- is intended to result in an estimate such that the probability of loss greater than the estimate is no more than one percent; and
- uses certain interest-rate and market price scenarios we develop in accordance with Finance Agency guidance.

The table below presents the VaR estimate ($ amounts in millions).

	VaR			
Years Ended	**Year-End**	**High**	**Low**	**Average**
December 31, 2023	$ 772	$ 772	$ 261	$ 592
December 31, 2022	173	777	173	610

Duration of Equity. Duration of equity is a measure of interest-rate risk and is one of the primary metrics used to manage our market risk exposure. It is a linear estimate of the percentage change in our MVE that could be caused by a 100 bps parallel upward or downward shift in the interest-rate curves. We value our portfolios using a mix of the EFFR/SOFR curve, Agency curve, U.S. Treasury curve and external prices. The market value and interest-rate sensitivity of each asset, liability, and off-balance sheet position is determined to compute our duration of equity. We calculate duration of equity using the interest-rate curve as of the date of calculation and for defined interest rate shock scenarios, including scenarios for which the interest-rate curve is 100 bps and 200 bps higher or lower than the base level. Our board of directors determines acceptable ranges for duration of equity for the base scenario. A negative duration of equity suggests adverse exposure to falling rates and a favorable response to rising rates, while a positive duration suggests adverse exposure to rising rates and a favorable response to falling rates.

The Bank's duration of equity is impacted by the convexity of its financial instruments. Convexity measures the rate of change of duration, or curvature, as a function of interest-rate changes. Measurement of convexity is important because of the optionality embedded in the mortgage assets and callable debt liabilities. The mortgage assets exhibit negative convexity due to embedded prepayment options. Callable debt liabilities exhibit positive convexity due to embedded options that we can exercise to redeem the debt prior to maturity. Management routinely reviews the net convexity exposure and considers it when developing funding and hedging strategies for the acquisition of mortgage-based assets. A primary strategy for managing convexity risk arising from our mortgage portfolio is the issuance of callable debt. The negative convexity of the mortgage assets tends to be partially offset by the positive convexity contributed by underlying callable debt liabilities.

Market Value of Equity. MVE represents the difference between the estimated market value of total assets and the estimated market value of total liabilities, including any off-balance sheet positions. It measures, in present value terms, the long-term economic value of current capital and the long-term level and volatility of net interest income.

We also monitor the sensitivities of MVE to potential interest-rate scenarios. We measure potential changes in the market value to book value of equity based on the current month-end level of rates versus various large parallel and non-parallel shifts in rates. Our board of directors determines acceptable ranges for the change in MVE for 200 bps parallel upward or downward shift in the interest-rate curves as well as certain flattening and steepening scenarios.

Key Metrics. The following table presents certain market and interest-rate metrics under different interest-rate scenarios ($ amounts in millions).

	December 31, 2023				
Key Metric	**Down 200**	**Down 100**	**Base**	**Up 100**	**Up 200**
MVE	$ 4,134	$ 4,153	$ 4,143	$ 4,108	$ 4,055
Percent change in MVE from base	(0.2)%	0.3 %	— %	(0.8)%	(2.1)%
MVE/book value of equity	100.5 %	101.0 %	100.7 %	99.9 %	98.6 %
Duration of equity	(0.9)	(0.1)	0.5	1.1	1.4

	December 31, 2022				
Key Metric	**Down 200**	**Down 100**	**Base**	**Up 100**	**Up 200**
MVE	$ 3,416	$ 3,431	$ 3,437	$ 3,441	$ 3,439
Percent change in MVE from base	(0.6)%	(0.2)%	0 %	0.1 %	0.1 %
MVE/book value of equity	90.9 %	91.4 %	91.5 %	91.6 %	91.6 %
Duration of equity	(0.6)	(0.3)	(0.1)	(0.1)	0.2

The changes in these key metrics from December 31, 2022 resulted primarily from model enhancements and the change in market value of the Bank's assets and liabilities in response to changes in the market environment, changes in portfolio composition and our hedging strategies.

Duration Gap. A related measure of interest-rate risk is duration gap, which is the difference between the estimated durations (market value sensitivity) of assets and liabilities. Duration gap measures the sensitivity of assets and liabilities to interest-rate changes. Duration generally indicates the expected change in an instrument's market value resulting from an increase or a decrease in interest rates. Higher duration numbers, whether positive or negative, indicate greater volatility of market value in response to changing interest rates. The base case duration gap at December 31, 2023 and 2022 was 0.00% and (0.03)% , respectively.

As part of our overall interest-rate risk management process, we continue to evaluate strategies to manage interest-rate risk.

Use of Derivative Hedges

We use derivatives to hedge our market risk exposures. The primary types of derivatives used are interest-rate swaps, forward contracts and caps. Derivatives increase the flexibility of our funding alternatives by providing specific cash flows or characteristics that might not be as readily available or cost effective if obtained in the cash debt market. We do not speculate using derivatives and do not engage in derivatives trading.

Hedging Debt Issuance. When CO bonds are issued, we often use the derivatives market to create funding that is more attractively priced than the funding available in the consolidated obligations market. A typical hedge of this type occurs when a CO bond is issued, while we simultaneously execute a matching interest rate swap. The counterparty pays a rate on the swap to us, which is designed to mirror the interest rate we pay on the CO bond. In this transaction we typically pay a variable interest rate which closely matches the interest payments we receive on short-term or variable-rate advances or investments. This intermediation between the bond and swap markets permits the acquisition of funds by us at lower all-in costs than would otherwise be available through the issuance of simple fixed- or floating-rate consolidated obligations in the bond markets. The continued attractiveness of such debt depends on yield relationships between the debt and derivative markets. If conditions in these markets change, we may alter the types or terms of the CO bonds that we issue. Occasionally, interest rate swaps are executed to hedge discount notes.

Hedging Advances. Interest-rate swaps are also used to increase the flexibility of advance offerings by effectively converting the specific cash flows or characteristics that the borrower prefers into cash flows or characteristics that may be more readily or cost effectively funded in the debt markets.

Hedging Mortgage Loans. We use Agency TBAs to hedge MDC positions.

Hedging Investments. Some interest-rate swaps are executed to hedge investments. In addition, interest-rate caps are purchased to reduce the risk inherent in floating-rate instruments that include caps as part of the structure.

Other Hedges. We occasionally use derivatives, such as swaptions, to maintain our risk profile within the approved risk limits set forth in our risk management policies. We are permitted to act as an intermediary between certain smaller member institutions and the capital markets by executing interest-rate swaps with members, but have not done so.

The volume of derivative hedges is often expressed in terms of notional amount, which is the amount upon which interest payments are calculated. The following table highlights the notional amounts by type of hedged item, hedging instrument, and hedging objective ($ amounts in millions).

Hedged Item/Hedging Instrument	Hedging Objective	Hedge Accounting Designation	December 31, 2023	December 31, 2022
Advances:				
Pay fixed, receive floating interest-rate swap (without options)	Converts the advance's fixed rate to a variable-rate index.	Fair-value	$ 14,459	$ 13,259
Pay fixed, receive floating interest-rate swap (with options)	Converts the advance's fixed rate to a variable-rate index and offsets option risk in the advance.	Fair-value	7,491	8,479
Pay float, receive float basis swap	Reduces interest-rate sensitivity and repricing gaps by converting the advance's variable-rate to a different variable-rate index.	Economic	—	2,300
Sub-total advances			21,950	24,038
Investments:				
Pay fixed, receive floating interest-rate swap	Converts the investment's fixed rate to a variable-rate index.	Fair-value	9,569	8,351
		Economic	600	1,750
Pay fixed, receive floating interest-rate swap (with options)	Converts the investment's fixed rate to a variable-rate index and offsets option risk in the investment.	Fair-value	5,733	5,224
Interest-rate cap	Offsets the interest-rate cap embedded in a variable-rate investment.	Economic	811	611
Sub-total investments			16,713	15,936
Mortgage loans:				
Forward settlement agreement	Protects against changes in market value of fixed-rate MDCs resulting from changes in interest rates.	Economic	58	30
Sub-total mortgage loans			58	30
CO bonds:				
Receive fixed, pay floating interest-rate swap (without options)	Converts the bond's fixed rate to a variable-rate index.	Fair-value	3,839	2,869
		Economic	—	140
Receive fixed or structured, pay floating interest-rate swap (with options)	Converts the bond's fixed rate to a variable-rate index and offsets option risk in the bond.	Fair-value	34,245	27,921
		Economic	10	10
Sub-total CO bonds			38,094	30,940
Discount notes:				
Receive fixed, pay floating interest-rate swap	Converts the discount note's fixed rate to a variable-rate index.	Economic	—	2,000
Sub-total discount notes			—	2,000
Stand-alone derivatives:				
MDCs	Not Applicable	N/A	57	31
Sub-total stand-alone derivatives			57	31
Total notional			$ 76,872	$ 72,975

The use of different types of derivatives varies based on our balance sheet size, our members' demand for advances, mortgage loan purchase activity, and consolidated obligation issuance levels.

Interest-Rate Swaps. The following table presents the amount swapped by interest-rate payment terms for trading and AFS securities, advances, CO bonds, and discount notes ($ amounts in millions).

	December 31, 2023			December 31, 2022		
Financial Instrument and Interest-Rate Payment Term	**Total Outstanding**	**Amount Swapped**	**% Swapped**	**Total Outstanding**	**Amount Swapped**	**% Swapped**
Trading securities:						
Total fixed-rate	$ 600	$ 600	100 %	$ 2,230	$ 2,230	100 %
Total trading securities, fair value	$ 600	$ 600	100 %	$ 2,230	$ 2,230	100 %
AFS securities:						
Total fixed-rate	$ 14,254	$ 14,254	100 %	$ 12,190	$ 12,190	100 %
Total AFS securities, amortized cost	$ 14,254	$ 14,254	100 %	$ 12,190	$ 12,190	100 %
Advances:						
Total fixed-rate	$ 29,623	$ 21,950	74 %	$ 31,397	$ 21,739	69 %
Total variable-rate	6,254	—	— %	5,894	2,300	39 %
Total advances, par value	$ 35,877	$ 21,950	61 %	$ 37,291	$ 24,039	64 %
CO bonds:						
Total fixed-rate	$ 46,438	$ 38,094	82 %	$ 39,226	$ 30,939	79 %
Total variable-rate	3,390	—	— %	2,776	—	— %
Total CO bonds, par value	$ 49,828	$ 38,094	76 %	$ 42,002	$ 30,939	74 %
Discount notes:						
Total fixed-rate	$ 22,737	$ —	— %	$ 27,534	$ 2,000	7 %
Total discount notes, par value	$ 22,737	$ —	— %	$ 27,534	$ 2,000	7 %

The decrease in variable-rate swapped advances resulted from the Bank ceasing to utilize basis swaps to hedge variable-rate advances after the LIBOR transition date.

For information on credit risk related to derivatives, see *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Management - Credit Risk Management - Derivatives*.

Replacement of the LIBOR Benchmark Interest Rate

The replacement of LIBOR did not have a material impact on the Bank's business, results of operations or financial condition. Through June 30, 2023, the Bank had exposure related to various financial instruments with interest rates indexed to LIBOR. However, the USD LIBOR index became fixed at June 30, 2023 and all of the Bank's fixed-rate LIBOR instruments were subsequently reset to SOFR or another interest rate. As a result, the Bank has no further exposure to LIBOR.

Management's Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over our financial reporting ("ICFR"), as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act. Our ICFR 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 and includes those policies and procedures that:

- pertain to the maintenance of our records that, in reasonable detail, accurately and fairly reflect our transactions and asset dispositions;
- provide reasonable assurance that our transactions are recorded as necessary to permit the preparation of our financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and board of directors; and
- provide reasonable assurance regarding the prevention or timely detection of any unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Reasonable assurance, as defined in Section 13(b)(7) of the Exchange Act, is the level of detail and degree of assurance that would satisfy prudent officials in the conduct of their own affairs in devising and maintaining a system of internal accounting controls.

Because of its inherent limitations, ICFR 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.

Under the supervision and with the participation of our management, including our principal executive officer, principal financial officer and principal accounting officer, we assessed the effectiveness of our ICFR as of December 31, 2023. Our assessment included extensive documentation, evaluation, and testing of the design and operating effectiveness of our ICFR. In making this assessment, our management used the criteria established in *Internal Control — Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission. These criteria include the areas of control environment, risk assessment, control activities, information and communication, and monitoring. Based on our assessment using these criteria, our management concluded that we maintained effective ICFR as of December 31, 2023.

Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders of the Federal Home Loan Bank of Indianapolis

Opinions on the Financial Statements and Internal Control over Financial Reporting

We have audited the accompanying statements of condition of the Federal Home Loan Bank of Indianapolis (the "Bank") as of December 31, 2023 and 2022, and the related statements of income, of comprehensive income, of capital and of cash flows for each of the three years in the period ended December 31, 2023, including the related notes (collectively referred to as the "financial statements"). We also have audited the Bank's internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of the Bank as of December 31, 2023 and 2022, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2023 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Bank maintained, in all material respects, effective internal control over financial reporting as of December 31, 2023, based on criteria established in *Internal Control - Integrated Framework* (2013) issued by the COSO.

Basis for Opinions

The Bank's management is responsible for these financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in Management's Report on Internal Control over Financial Reporting appearing under Item 8. Our responsibility is to express opinions on the Bank's financial statements and on the Bank's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Bank 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 audits to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

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

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 (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) 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 (iii) 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.

Critical Audit Matters

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (i) relates to accounts or disclosures that are material to the financial statements and (ii) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the 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.

Valuation of Interest-Rate Related Derivatives and Hedged Items

As described in Notes 8 and 16 to the financial statements, the Bank uses derivatives to reduce funding costs and to manage its exposure to interest-rate risks, among other objectives. The total notional amount of derivatives as of December 31, 2023 was $77 billion, of which 98% were designated as hedging instruments, and the net fair value of derivative assets and liabilities as of December 31, 2023 was $521 million and $7 million, respectively. The fair values of interest-rate related derivatives and hedged items are generally estimated using standard valuation techniques such as discounted cash-flow analysis and comparisons to similar instruments. The discounted cash-flow analysis uses market-observable inputs, such as interest rate curves and volatility assumptions.

The principal considerations for our determination that performing procedures relating to the valuation of interest-rate related derivatives and hedged items is a critical audit matter are the significant audit effort in evaluating the interest rate curves and volatility assumptions used to fair value these derivatives and hedged items, and the audit effort involved the use of professionals with specialized skill and knowledge.

Addressing the matter involved performing procedures and evaluating audit evidence in connection with forming our overall opinion on the financial statements. These procedures included testing the effectiveness of controls relating to the valuation of interest-rate related derivatives and hedged items, including controls over the method, data and assumptions. These procedures also included, among others, the involvement of professionals with specialized skill and knowledge to assist in developing an independent range of prices for a sample of interest-rate related derivatives and hedged items and comparison of management's estimate to the independently developed ranges. Developing the independent range of prices involved testing the completeness and accuracy of data provided by management and independently developing the interest rate curves and volatility assumptions.

/s/ PricewaterhouseCoopers LLP
Indianapolis, Indiana
March 12, 2024

We have served as the Bank's auditor since 1990.

Federal Home Loan Bank of Indianapolis
Statements of Condition
($ amounts in thousands, except par value)

	December 31, 2023	December 31, 2022
Assets:		
Cash and due from banks (Note 3)	$ 58,844	$ 21,161
Interest-bearing deposits (Note 4)	892,049	856,060
Securities purchased under agreements to resell (Note 4)	6,500,000	4,550,000
Federal funds sold (Note 4)	4,101,000	3,148,000
Trading securities (Note 4)	600,063	2,230,248
Available-for-sale securities (amortized cost of $14,254,103 and $12,189,776) (Note 4)	14,194,326	12,179,837
Held-to-maturity securities (estimated fair values of $5,179,399 and $4,156,218) (Note 4)	5,256,803	4,240,201
Advances (Note 5)	35,561,844	36,682,459
Mortgage loans held for portfolio, net (Note 6)	8,613,844	7,686,455
Accrued interest receivable	203,809	152,867
Derivative assets, net (Note 8)	521,164	434,421
Other assets	104,658	102,071
Total assets	$ 76,608,404	$ 72,283,780
Liabilities:		
Deposits (Note 9)	$ 628,811	$ 595,907
Consolidated obligations (Note 10):		
Discount notes	22,621,837	27,387,492
Bonds	48,431,566	39,882,454
Total consolidated obligations, net	71,053,403	67,269,946
Accrued interest payable	327,237	162,584
Affordable Housing Program payable (Note 11)	68,301	38,170
Derivative liabilities, net (Note 8)	6,940	19,209
Mandatorily redeemable capital stock (Note 12)	369,041	372,503
Other liabilities	410,774	441,763
Total liabilities	72,864,507	68,900,082
Commitments and contingencies (Note 17)		
Capital (Note 12):		
Capital stock (putable at par value of $100 per share):		
Class B issued and outstanding shares: 22,852,579 and 21,231,253	2,285,258	2,123,125
Retained earnings:		
Unrestricted	1,134,132	963,812
Restricted	398,039	322,552
Total retained earnings	1,532,171	1,286,364
Total accumulated other comprehensive income (loss) (Note 13)	(73,532)	(25,791)
Total capital	3,743,897	3,383,698
Total liabilities and capital	$ 76,608,404	$ 72,283,780

The accompanying notes are an integral part of these financial statements.

Federal Home Loan Bank of Indianapolis
Statements of Income
($ amounts in thousands)

	Years Ended December 31,		
	2023	2022	2021
Interest Income:			
Advances	$ 1,943,129	$ 634,269	$ 115,634
Interest-bearing deposits	123,858	37,303	534
Securities purchased under agreements to resell	118,571	53,496	1,730
Federal funds sold	240,388	78,004	2,821
Trading securities	12,894	25,965	48,510
Available-for-sale securities	808,400	285,252	99,646
Held-to-maturity securities	254,469	69,363	31,792
Mortgage loans held for portfolio	254,140	206,984	169,132
Total interest income	3,755,849	1,390,636	469,799
Interest Expense:			
Consolidated obligation discount notes	1,001,022	373,757	9,067
Consolidated obligation bonds	2,203,964	712,038	206,429
Deposits	37,868	12,003	162
Mandatorily redeemable capital stock	17,540	2,140	2,601
Total interest expense	3,260,394	1,099,938	218,259
Net interest income	495,455	290,698	251,540
Provision for (reversal of) credit losses	(220)	(74)	(108)
Net interest income after reversal of credit losses	495,675	290,772	251,648
Other Income:			
Net gains (losses) on sales of available-for-sale and held-to-maturity securities	(6,781)	(1,059)	—
Net gains (losses) on trading securities	19,616	(22,574)	(47,314)
Net gains (losses) on derivatives	181	48,429	3,684
Net gains (losses) on extinguishment of debt	19,846	—	—
Other, net	13,033	(5,352)	9,811
Total other income (loss)	45,895	19,444	(33,819)
Other Expenses:			
Compensation and benefits	65,174	59,006	60,622
Other operating expenses	33,621	30,836	30,089
Federal Housing Finance Agency	6,530	7,229	6,336
Office of Finance	4,659	5,437	6,377
Other, net	10,264	11,086	9,801
Total other expenses	120,248	113,594	113,225
Income before assessments	421,322	196,622	104,604
Affordable Housing Program assessments	43,886	19,876	10,720
Net income	$ 377,436	$ 176,746	$ 93,884

The accompanying notes are an integral part of these financial statements.

Federal Home Loan Bank of Indianapolis
Statements of Comprehensive Income
($ amounts in thousands)

	Years Ended December 31,		
	2023	2022	2021
Net income	$ 377,436	$ 176,746	$ 93,884
Other Comprehensive Income:			
Net change in unrealized gains (losses) on available-for-sale securities	(49,838)	(161,881)	15,021
Pension benefits, net (Note 14)	2,097	3,032	12,635
Total other comprehensive income (loss)	(47,741)	(158,849)	27,656
Total comprehensive income	$ 329,695	$ 17,897	$ 121,540

The accompanying notes are an integral part of these financial statements.

Federal Home Loan Bank of Indianapolis
Statements of Capital
Years Ended December 31, 2021, 2022, and 2023
($ amounts and shares in thousands)

	Capital Stock		Retained Earnings			Accumulated Other Comprehensive Income (Loss)	Total Capital
	Shares	Par Value	Unrestricted	Restricted	Total		
Balance, December 31, 2020	22,076	$ 2,207,570	$ 868,904	$ 268,426	$ 1,137,330	$ 105,402	$ 3,450,302
Comprehensive income			75,107	18,777	93,884	27,656	121,540
Proceeds from issuance of capital stock	996	99,638					99,638
Redemption/repurchase of capital stock	(563)	(56,277)					(56,277)
Shares reclassified to mandatorily redeemable capital stock, net	(47)	(4,730)					(4,730)
Cash dividends on capital stock (2.44%)			(54,142)	—	(54,142)		(54,142)
Balance, December 31, 2021	22,462	$ 2,246,201	$ 889,869	$ 287,203	$ 1,177,072	$ 133,058	$ 3,556,331
Comprehensive income (loss)			141,397	35,349	176,746	(158,849)	17,897
Proceeds from issuance of capital stock	3,680	368,041					368,041
Redemption/repurchase of capital stock	(1,619)	(161,885)					(161,885)
Shares reclassified to mandatorily redeemable capital stock, net	(3,292)	(329,232)					(329,232)
Cash dividends on capital stock (2.95%)			(67,454)	—	(67,454)		(67,454)
Balance, December 31, 2022	21,231	$ 2,123,125	$ 963,812	$ 322,552	$ 1,286,364	$ (25,791)	$ 3,383,698
Comprehensive income (loss)			301,949	75,487	377,436	(47,741)	329,695
Proceeds from issuance of capital stock	3,636	363,614					363,614
Redemption/repurchase of capital stock	(2,003)	(200,309)					(200,309)
Shares reclassified to mandatorily redeemable capital stock, net	(12)	(1,172)					(1,172)
Cash dividends on capital stock (5.71%)			(131,629)	—	(131,629)		(131,629)
Balance, December 31, 2023	22,852	$ 2,285,258	$ 1,134,132	$ 398,039	$ 1,532,171	$ (73,532)	$ 3,743,897

The accompanying notes are an integral part of these financial statements.

Federal Home Loan Bank of Indianapolis
Statements of Cash Flows
($ amounts in thousands)

	Years Ended December 31,		
	2023	2022	2021
Operating Activities:			
Net income	$ 377,436	$ 176,746	$ 93,884
Adjustments to reconcile net income to net cash provided by operating activities:			
Amortization and depreciation	63,069	167,348	84,157
Changes in net derivative and hedging activities	(391,229)	1,086,752	178,305
Net gains on extinguishment of debt	(19,846)	—	—
Reversal of credit losses	(220)	(74)	(108)
Net (gains) losses on trading securities	(19,616)	22,574	47,314
Other adjustments	6,781	1,059	—
Changes in:			
Accrued interest receivable	(50,328)	(77,386)	21,671
Other assets	(5,770)	14,333	(21,453)
Accrued interest payable	164,746	75,115	24,487
Other liabilities	64,338	(1,749)	15,743
Total adjustments, net	(188,075)	1,287,972	350,116
Net cash provided by operating activities	189,361	1,464,718	444,000
Investing Activities:			
Net change in:			
Interest-bearing deposits	366,590	(2,090,076)	487,626
Securities purchased under agreements to resell	(1,950,000)	(1,050,000)	(1,000,000)
Federal funds sold	(953,000)	(568,000)	(1,365,000)
Trading securities:			
Proceeds from maturities	1,500,000	3,425,000	2,950,000
Proceeds from sales	494,063	200,000	50,006
Purchases	(344,261)	(1,930,219)	(1,899,417)
Available-for-sale securities:			
Proceeds from paydowns and maturities	195,419	730,132	835,255
Proceeds from sales	592,660	—	—
Purchases	(2,539,432)	(5,195,686)	(319,623)
Held-to-maturity securities:			
Proceeds from paydowns and maturities	455,929	890,409	996,151
Proceeds from sales	9,769	69,919	—
Purchases	(1,558,464)	(817,170)	(784,446)
Advances:			
Principal repayments	281,391,014	251,196,945	224,935,571
Disbursements to members	(279,976,584)	(261,178,835)	(221,554,319)
Mortgage loans held for portfolio:			
Principal collections	704,481	1,006,896	2,849,214
Purchases from members	(1,642,690)	(1,156,327)	(2,150,713)
Purchases of premises, software, and equipment	(5,255)	(4,916)	(4,411)
Loans to other Federal Home Loan Banks:			
Principal repayments	1,090,000	1,050,000	40,000
Disbursements	(1,090,000)	(1,050,000)	(40,000)
Net cash provided by (used in) investing activities	(3,259,761)	(16,471,928)	4,025,894

(continued)

The accompanying notes are an integral part of these financial statements.

Federal Home Loan Bank of Indianapolis
Statements of Cash Flows, continued
($ amounts in thousands)

	Years Ended December 31,		
	2023	**2022**	**2021**
Financing Activities:			
Net change in deposits	(7,237)	(590,663)	(8,809)
Net proceeds (payments) on derivative contracts with financing elements	9,464	900	(25,365)
Net proceeds from issuance of consolidated obligations:			
Discount notes	809,172,093	835,663,808	291,172,745
Bonds	21,966,675	17,914,235	43,151,651
Payments for matured and retired consolidated obligations:			
Discount notes	(813,966,061)	(820,497,490)	(295,668,613)
Bonds	(14,093,893)	(18,461,850)	(43,819,310)
Loans from other Federal Home Loan Banks:			
Proceeds from borrowings	500,000	—	—
Principal repayments	(500,000)	—	—
Proceeds from issuance of capital stock	363,614	368,041	99,638
Payments for redemption/repurchase of capital stock	(200,309)	(161,885)	(56,277)
Payments for redemption/repurchase of mandatorily redeemable capital stock	(4,634)	(7,151)	(205,076)
Dividend payments on capital stock	(131,629)	(67,454)	(54,142)
Net cash provided by (used in) financing activities	3,108,083	14,160,491	(5,413,558)
Net increase (decrease) in cash and due from banks	37,683	(846,719)	(943,664)
Cash and due from banks at beginning of year	21,161	867,880	1,811,544
Cash and due from banks at end of year	$ 58,844	$ 21,161	$ 867,880
Supplemental Disclosures:			
Cash activities:			
Interest payments	$ 2,978,983	$ 738,492	$ 265,209
Affordable Housing Program payments	15,618	16,914	14,073
Non-cash activities:			
Purchases of investment securities, traded but not yet settled	—	72,788	—

The accompanying notes are an integral part of these financial statements.

These Notes to Financial Statements should be read in conjunction with the Statements of Condition as of December 31, 2023 and 2022, and the Statements of Income, Comprehensive Income, Capital, and Cash Flows for the years ended December 31, 2023, 2022, and 2021.

Acronyms and terms used throughout these Notes to Financial Statements are defined herein or in the *Defined Terms*. Unless the context otherwise requires, the terms "we," "us," "our," and "Bank" refer to the Federal Home Loan Bank of Indianapolis or its management.

Background Information

The Federal Home Loan Bank of Indianapolis, a federally chartered corporation, is one of 11 regional wholesale FHLBanks in the United States. The FHLBanks are GSEs that were organized under the Bank Act to serve the public by enhancing the availability of credit for residential mortgages and targeted community development. Even though the Bank is part of the FHLBank System, we operate as a separate entity with our own management, employees, shareholders and board of directors.

Each FHLBank is a financial cooperative that provides a readily available, competitively-priced source of funds to its member institutions. Regulated financial depositories and non-captive insurance companies engaged in residential housing finance that have their principal place of business located in, or are domiciled in, our district states of Michigan or Indiana are eligible for membership. Additionally, qualified CDFIs are eligible to be members. Housing Associates, including state and local housing authorities, that meet certain statutory and regulatory criteria may also borrow from us, but are not members and, as such, are not allowed to hold our capital stock.

Each member must purchase a minimum amount of our capital stock based on the amount of its total assets. A member may be required to purchase additional activity-based capital stock as it engages in certain business activities with us. Members and former members own all of our capital stock. Former members (including certain non-member institutions that own our capital stock as a result of a merger with or acquisition of a member) hold our capital stock beyond the redemption period solely to support credit products or mortgage loans still outstanding on our statement of condition. All owners of our capital stock, to the extent declared by our board of directors, receive dividends on their capital stock, subject to applicable regulations.

The FHLBanks' Office of Finance facilitates the issuance and servicing of the debt instruments of the FHLBanks, known as consolidated obligations, consisting of bonds and discount notes, and prepares and publishes the FHLBanks' combined quarterly and annual financial reports.

Proceeds from the issuance of consolidated obligations are the primary source of funds for the FHLBanks. We primarily use these funds to:

- disburse advances to members;
- acquire mortgage loans from PFIs through our MPP;
- maintain a portfolio of readily available liquid assets; and
- invest in MBS and other opportunities to support the residential housing market.

We also provide correspondent services, such as wire transfer, security safekeeping, and settlement services, to our members.

The Finance Agency is the independent federal regulator of the FHLBanks, Freddie Mac, and Fannie Mae. The Finance Agency's stated mission is to ensure that the housing GSEs operate in a safe and sound manner so that they serve as a reliable source of liquidity and funding for housing finance and community investment.

Note 1 - Summary of Significant Accounting Policies

Basis of Presentation. The accompanying financial statements have been prepared in accordance with GAAP and SEC requirements.

The financial statements contain all adjustments that are, in the opinion of management, necessary for a fair statement of the Bank's financial position, results of operations and cash flows for the periods presented. All such adjustments were of a normal recurring nature.

Use of Estimates. When preparing financial statements in accordance with GAAP, we are required to make subjective assumptions and estimates that may affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported amounts of income and expense. Although the reported amounts and disclosures reflect our best estimates, actual results could differ significantly from these estimates. The most significant estimates pertain to the fair values of financial instruments, specifically our derivatives and associated hedged items.

Estimated Fair Value. The estimated fair value amounts, recorded on the statement of condition and presented in the accompanying disclosures, reflect appropriate valuation methods and were determined based on the assumptions that we believe market participants would use in pricing the asset or liability. Although we use our best judgment in estimating fair value, there are inherent limitations in any valuation technique. Therefore, these estimated fair values may not be indicative of the amounts that would have been realized in market transactions on the reporting dates. For more information, see *Note 16 - Estimated Fair Values*.

Changes in Estimates. Changes in estimates are accounted for prospectively, i.e. in the period of change, and do not result in a revision or restatement of prior period amounts.

Reclassifications. We have reclassified certain amounts reported in prior periods to conform to the current period presentation. These reclassifications had no effect on total assets, total liabilities, total capital, net income, total comprehensive income or net cash flows.

Interest-Bearing Deposits, Securities Purchased under Agreements to Resell, and Federal Funds Sold. These investments provide short-term liquidity and are carried at cost. Securities purchased under agreements to resell are treated as short-term, collateralized financings and are generally transacted with an overnight term. These securities are held in safekeeping in the Bank's name by third-party custodians approved by us. For securities outstanding longer than overnight, if the market value of the underlying assets declines below the market value required as collateral, the counterparty must (i) place an equivalent amount of additional securities in safekeeping in the Bank's name, and/or (ii) remit an equivalent amount of cash to the Bank. Federal funds sold are short-term, unsecured loans that are generally transacted with an overnight term. Finance Agency regulations include a limit on the amount of unsecured credit an individual FHLBank may extend to a counterparty.

Investment Securities. Purchases and sales of securities are recorded on a trade date basis. We classify investments as trading, HTM or AFS at the date of acquisition.

Trading Securities. Securities classified as trading are held for liquidity purposes and carried at estimated fair value. Changes in the fair value of these securities are recorded through other income as net gains (losses) on trading securities. Finance Agency regulation and our risk management policies prohibit the speculative use of these instruments and limit the credit risk arising from these securities.

HTM Securities. Securities for which we have both the positive intent and ability to hold to maturity are classified as HTM and carried at amortized cost. The carrying value includes adjustments made to the cost basis of the security for purchase discount and related accretion, purchase premium and related amortization, and collection of principal.

AFS Securities. Securities that are not classified as trading or HTM are classified as AFS and carried at estimated fair value. Changes in the fair value of these securities are recorded in OCI as net change in unrealized gains (losses) on AFS securities, except for AFS securities in hedging relationships that qualify as fair-value hedges. For those securities, the portion of the change in fair value attributable to the risk being hedged is recorded in interest income together with the related change in the fair value of the derivative, and the remainder of the change in the fair value of the security is recorded in OCI as net change in unrealized gains (losses) on AFS securities.

Amortization or Accretion of Purchase Premiums and Discounts. Since the Bank holds a large number of similar loans underlying its MBS, for which prepayments are probable and the timing and amount of prepayments can be reasonably estimated, we amortize or accrete premiums, discounts, and cumulative fair-value hedging basis adjustments on MBS to interest income using a level-yield under the retrospective interest method. This method requires that we estimate prepayments over the estimated life of each security and retrospectively adjust the effective yield each time the estimated remaining cash flows change as if the new estimate had been used since the original acquisition date. Changes in interest rates are a significant assumption used in estimating the timing and amount of prepayments.

For all non-MBS, prepayments are not estimated but only taken into account as they actually occur.

For all non-MBS not classified as trading, we amortize or accrete premiums, discounts, and cumulative fair-value hedging basis adjustments to interest income using a level-yield methodology over the contractual life of each security, with the exception of our callable non-MBS not classified as trading, on which the purchase premium is amortized to the next call date.

For our non-MBS classified as trading, the amortization and accretion of purchase premiums and discounts are considered components of the security's unrealized gains and losses and are recorded in other income as net gains (losses) on trading securities.

Gains and Losses on Sales. We compute gains and losses on sales of investment securities using the specific identification method and include these gains and losses in other income as net gains (losses) on sales of available-for-sale and held-to-maturity securities.

Advances. We record advances at amortized cost, adjusted to include deferred swap termination fees associated with modified advances, net of deferred prepayment fees, and cumulative fair-value hedging basis adjustments. We amortize such fees and hedging basis adjustments to interest income using a level-yield methodology over the contractual life of the advance. When an advance is prepaid, we amortize to interest income a proportionate share of the remaining balance of those adjustments.

Prepayment Fees. We charge a prepayment fee when a borrower repays certain advances prior to maturity. We report prepayment fees, net of any associated swap termination fees and cumulative fair-value hedging basis adjustments, in interest income on advances.

Advance Modifications. When the Bank funds a new advance concurrent with, or within a short period of time after, the prepayment of an original advance, we determine whether the transaction is effectively either (i) two separate transactions (the prepayment of the original advance and the disbursement of a new advance), defined as an advance extinguishment, or (ii) the continuation of the original advance as modified, defined as an advance modification.

We account for the transaction as an extinguishment if both of the following criteria are met: (i) the effective yield of the new advance is at least equal to the effective yield for a comparable advance to a member with similar collection risks who is not prepaying, and (ii) modifications of the original advance are determined to be more than minor, i.e., if the present value of the cash flows under the terms of the new advance is at least 10% different from the present value of the remaining cash flows under the original advance, or through an evaluation of qualitative factors, which may include changes in the interest-rate exposure to the member by moving from a fixed to an adjustable-rate advance. In all other instances, the transaction is accounted for as an advance modification.

If the transaction is determined to be an advance extinguishment, we recognize income from nonrefundable prepayment fees, net of associated swap termination fees, in the period that the extinguishment occurs. Alternatively, if no prepayment fees are received (e.g., the member requests that we embed the prepayment fee into the rate of the new advance), the excess of the present value of the cash flows of the new advance over those of an advance with a current market rate and otherwise comparable terms is immediately recognized in income, and the basis of the new advance is adjusted accordingly.

If the transaction is determined to be an advance modification, the nonrefundable prepayment fees, net of associated swap termination fees, are not immediately recognized in income but are (i) included in the carrying value of the modified advance and amortized into interest income over the life of the new advance using a level-yield methodology or (ii) embedded into the rate of the modified advance and recorded as an adjustment to the interest accrual.

Mortgage Loans Held for Portfolio. We classify mortgage loans, for which we have the positive intent and ability to hold for the foreseeable future or until maturity or payoff, as held for portfolio. Accordingly, these mortgage loans are carried at amortized cost, adjusted to include premiums paid to and discounts received from PFIs, hedging basis adjustments, and the allowance for credit losses.

Amortization or Accretion of Purchase Premiums and Discounts. We amortize or accrete premiums and discounts and hedging basis adjustments to interest income using a level-yield methodology over the contractual life of each loan. When a loan is prepaid, we amortize to interest income a proportionate share of the remaining balance of those adjustments.

Non-accrual Loans. We place a conventional mortgage loan on non-accrual status if it is determined that either (i) the collection of interest or principal is doubtful, or (ii) interest or principal is past due for 90 days or more, except when the loan is well secured and in the process of collection (e.g., through credit enhancements and monthly servicer remittances on a scheduled/scheduled basis in which we receive monthly principal and interest payments from the servicer regardless of whether the borrower has made payments to the servicer). Monthly servicer remittances for loans on an actual/actual basis may also be well secured; however, servicers on actual/actual remittance do not advance principal and interest due, regardless of borrower creditworthiness, until the payments are received from the borrower or when the loan is repaid. As a result, these loans are placed on non-accrual status once they become 90 days delinquent.

A government-guaranteed or -insured mortgage loan is not placed on non-accrual status when the collection of the contractual principal or interest is 90 days or more past due because of the contractual obligation of the loan servicer to pay defaulted interest at the contractual rate.

For those mortgage loans placed on non-accrual status, accrued but uncollected interest is reversed against interest income (for any interest accrued in the current year) and/or the allowance for credit losses (for any interest accrued in the previous year). We record payments received on non-accrual loans as a direct reduction of the amortized cost of the loan. When the amortized cost has been fully collected, any additional amounts collected are recognized as interest income. A loan on non-accrual status may be restored to accrual status when it becomes current (zero days past due) and three consecutive and timely monthly payments have been received.

Mortgage Loan Modifications. As a result of prospectively adopting new accounting guidance on January 1, 2023, which discontinued the recognition and measurement guidance on troubled debt restructurings (TDRs), we evaluate whether the terms of a loan modification made for borrowers experiencing financial difficulty are such that the modified loan should be accounted for as a new loan or a continuation of an existing loan. Prior to January 1, 2023, we evaluated mortgage loan modifications resulting from borrowers experiencing financial difficulty utilizing the TDR guidance.

Charge-Offs. A charge-off is recorded to the extent that the amortized cost (including UPB, unamortized premiums or discounts, and hedging basis adjustments) of a loan will not be fully recovered. We record a charge-off on a conventional mortgage loan against the credit loss allowance upon the occurrence of a confirming event. Confirming events include, but are not limited to, the settlement of a claim against any of the credit enhancements, delinquency in excess of 180 days unless we determine that the delinquent loan is well-secured and in-process of collection, and filing for bankruptcy protection. We charge off the portion of the outstanding conventional mortgage loan balance in excess of the fair value of the underlying property, less costs to sell and adjusted for any available credit enhancements.

Allowance for Credit Losses on Financial Instruments. The Bank's financial instruments, i.e. interest-bearing deposits, securities purchased under agreements to resell, federal funds sold, investment securities, advances (including off-balance sheet credit exposures), and mortgage loans held for portfolio, are evaluated quarterly for expected credit losses. If necessary, an allowance for credit losses is recorded with a corresponding adjustment to the provision for credit losses. The allowance for credit losses excludes uncollectible accrued interest receivable for all instruments, which is measured separately. Any uncollectible accrued interest is written off by a reversal of interest income.

For more information on the allowance methodology related to our financial instruments, see *Note 4 - Investments, Note 5 - Advances, and Note 6 - Mortgage Loans Held for Portfolio.*

Financial Instruments Meeting Netting Requirements. We present certain financial instruments on a net basis when the Bank has a legal right of offset and all other requirements for netting are met (collectively referred to as the netting requirements).

Derivatives and Hedging Activities. We record derivative instruments, including related cash collateral and accrued interest, on a net basis, by clearing agent and/or by counterparty, as either derivative assets or derivative liabilities at their estimated fair values. Changes in the estimated fair value of derivatives are recorded in current period earnings.

For derivative instruments that meet the netting requirements, any excess cash collateral received or pledged is recognized as a derivative liability or derivative asset, respectively. For derivative instruments that do not meet the netting requirements, cash collateral is recognized as an interest-bearing asset or liability, as appropriate. Additional information regarding these transactions is provided in *Note 8 - Derivatives and Hedging Activities.*

Designations. Derivatives are recorded beginning on the trade date and typically executed and designated in a qualifying hedging relationship at the same time as the acquisition of the associated hedged item. We may also designate the hedging relationship upon the Bank's commitment to disburse an advance, purchase financial instruments, or trade a consolidated obligation in which settlement occurs within the shortest period of time possible for the type of instrument based on market settlement conventions. Each derivative is designated as one of the following:

(i) a qualifying hedge of the change in fair value of a recognized asset or liability (e.g., advances, AFS investments, and CO bonds) or an unrecognized firm commitment (fair-value hedge); or

(ii) a non-qualifying hedge for asset/liability management purposes (economic hedge).

In all cases involving a fair-value hedge of a recognized asset, liability or firm commitment, the designated risk being hedged is the risk of changes in the fair value of the hedged item attributable to changes in the designated benchmark interest rate.

Accounting for Qualifying Hedges. Generally, we endeavor to use derivatives that qualify for fair-value hedge accounting. To qualify for hedge accounting, hedging relationships must meet certain criteria including, but not limited to, formal documentation of the hedging relationship and an expectation to be highly effective. Two approaches to account for qualifying fair-value hedge relationships include:

(i) Shortcut hedge accounting - Hedging relationships that meet certain criteria qualify for the shortcut method of hedge accounting. Under the shortcut method, an assumption can be made that the entire change in fair value of a hedged item, due to changes in the benchmark interest rate, equates to the entire change in fair value of the related derivative. As a result, the derivative is considered to be perfectly effective in achieving offsetting changes in the fair value of the hedged asset or liability attributable to the hedged risk. When applying the shortcut method, we document, at inception of the hedging relationship, a quantitative long-haul method that we can apply should we subsequently determine a hedging relationship no longer qualifies for shortcut hedge accounting; or

(ii) Long-haul hedge accounting - The application of long-haul hedge accounting requires us to assess whether the derivatives used in hedging relationships are highly effective in achieving offsetting changes in the fair value of hedged items or forecasted transactions attributable to the hedged risk and whether those derivatives may be expected to continue to be highly effective in future periods. As part of the assessment, a regression analysis is performed at the inception of each hedging relationship and at each month-end thereafter. If the hedging relationship fails the effectiveness test at inception, we do not apply hedge accounting. If the hedging relationship fails the effectiveness test during the life of the relationship, hedge accounting is discontinued.

While a number of long-haul methods and techniques are permissible, we utilize the following:

- *Total Contractual Coupon Method* - In calculating the change in fair value of the hedged item attributable to changes in the benchmark interest rate, the estimated coupon cash flows are based on the full contractual coupon.
- *Benchmark Component Method* - In calculating the change in fair value of the hedged item attributable to changes in the benchmark interest rate, the credit and any other risks embedded in the contractual coupon rate are excluded from the estimated cash flows by aligning the interest component of the derivative with the hedged item. Given this alignment, the application of the benchmark component method generally results in less hedge ineffectiveness in comparison to the total contractual coupon method.

Changes in the fair value of a derivative that is designated and qualifies as a fair-value hedge, along with changes in the fair value of the hedged asset or liability that are attributable to the hedged risk, are recorded in net interest income in the same line as the earnings effect of the hedged item.

Accounting for Non-Qualifying Hedges. An economic hedge is defined as a derivative that hedges specific or non-specific underlying assets, liabilities, or firm commitments and does not qualify, or was not designated, for hedge accounting. As a result, we recognize the net interest settlements and the change in fair value of these derivatives in other income with no offsetting fair-value adjustments in earnings for the hedged assets, liabilities, or firm commitments. An economic hedge by definition, therefore, introduces the potential for earnings variability.

Accrued Interest Receivables and Payables. The difference between the interest receivable and payable on a derivative designated as a qualifying hedge is recognized as a net adjustment to the interest income or expense of the designated hedged item. The difference between the interest receivable and payable on an economic hedge is recognized in other income as net gains (losses) on derivatives.

Discontinuance of Hedge Accounting. We discontinue hedge accounting prospectively when: (i) the hedging relationship ceases to be highly effective or is otherwise discontinued; (ii) the derivative and/or the hedged item expires or matures, is sold, terminated, transferred or exercised; or (iii) a hedged firm commitment no longer meets the definition of a firm commitment.

When hedge accounting is discontinued and the derivative and hedged item remain, we: (i) continue to carry the derivative on the statement of condition at fair value as an economic hedge; (ii) cease adjusting the hedged asset or liability for changes in fair value; and (iii) amortize the cumulative basis adjustment on the hedged item into interest income over the remaining life of the hedged item using a level-yield methodology.

When we discontinue a qualifying hedge relationship by terminating the derivative and subsequently designating the associated hedged item into a new qualifying hedge relationship, we: (i) recognize the cumulative gain (loss) on the derivative in current period earnings; (ii) pay or receive a termination fee with the counterparty, substantially offsetting the recognized gain (loss) on the derivative; (iii) cease adjusting the hedged asset or liability for changes in fair value; and (iv) amortize the cumulative basis adjustment on the hedged item into interest income over the remaining life of the hedged item using a level-yield methodology.

Premises, Software, and Equipment. We record premises, software, and equipment at cost, less accumulated depreciation and amortization, in other assets, and compute depreciation and amortization using the straight-line method over their respective estimated useful lives, which range from 3 to 40 years. We capitalize building improvements, but expense maintenance and repairs when incurred. In addition, we capitalize software development costs for internal use software and use the straight-line method for computing amortization. We include any gain or loss on disposal (other than abandonment) of premises, software, and equipment in other income. Any loss on abandonment is included in other operating expenses.

Consolidated Obligations. Consolidated obligations are carried at amortized cost, adjusted to include concessions, discounts, premiums, principal payments, and cumulative fair-value hedging basis adjustments.

Concessions. Concessions are paid to dealers in connection with the issuance of certain consolidated obligations. The Office of Finance prorates the amount of the Bank's concession based upon the percentage of the debt issued on the Bank's behalf. We record concessions paid on consolidated obligations as a direct deduction from their carrying amounts, consistent with the presentation of discounts on consolidated obligations. The concessions are deferred and amortized, using a level-yield methodology, to interest expense over the term to contractual maturity of the corresponding consolidated obligation. When we prepay a CO bond, a proportionate share of any remaining balance of concessions is recognized as interest expense.

Discounts and Premiums. We accrete or amortize the discounts and premiums as well as cumulative fair-value hedging basis adjustments to interest expense using a level-yield methodology over the term to contractual maturity of the corresponding CO bond. When we prepay a CO bond, a proportionate share of the remaining balance of those adjustments is recognized as interest income.

Debt Extinguishments. When we extinguish a CO prior to the contractual maturity date on other than a call date, any gain or loss resulting from the extinguishment is recorded in other income (loss) as the difference between the cash paid (market price) and the current carrying value. We do not consider these gains or losses to be extraordinary.

Mandatorily Redeemable Capital Stock. When a member withdraws or attains non-member status by merger or acquisition, charter termination, relocation or other involuntary termination from membership, the member's shares of Class B stock are then subject to redemption, at which time a five-year redemption period commences. Since the shares meet the definition of a mandatorily redeemable financial instrument, the shares are reclassified from capital to liabilities as MRCS at estimated fair value, which is equal to par value. Dividends declared on shares classified as a liability are accrued at the expected dividend rate and reported as interest expense.

We reclassify MRCS from liabilities to capital when non-members subsequently become members through either acquisition, merger, or election. After the reclassification, dividends declared on that capital stock are no longer classified as interest expense.

Employee Retirement and Deferred Compensation Plans. We recognize the required contribution to the DB Plan ratably over the plan year to which it relates. Without a prefunding election, any contribution made in excess of the minimum required contribution is recorded as an expense in the quarterly reporting period in which the contribution is made; with a prefunding election, such excess contribution is recorded as a prepaid asset.

Settlement gains and losses are recognized in earnings only when the total cost of all settlements during a year exceeds the sum of the service and interest cost components of the net periodic pension cost for the year.

Finance Agency Expenses. The portion of the Finance Agency's expenses and working capital fund not allocated to Freddie Mac and Fannie Mae is allocated among the FHLBanks as assessments, which are based on the ratio of each FHLBank's minimum required regulatory capital to the aggregate minimum required regulatory capital of every FHLBank. We record our share of these assessments in other expenses.

Office of Finance Expenses. Our proportionate share of the Office of Finance's operating and capital expenditures is calculated based upon two components as follows: (i) two-thirds based on our share of total consolidated obligations outstanding and (ii) one-third based on equal pro-rata allocation. We record our share of these expenditures in other expenses.

Cash Flows. We consider cash and due from banks on the statement of condition as cash and cash equivalents within the statement of cash flows because of their highly liquid nature. Federal funds sold, securities purchased under agreements to resell, and interest-bearing deposits are not treated as cash and cash equivalents, but instead are treated as short-term investments. Accordingly, their associated cash flows are reported in the investing activities section of the statement of cash flows.

Cash flows associated with derivatives are reported as cash flows from operating activities in the statement of cash flows unless the derivatives contain financing elements, in which case they are reflected as cash flows from financing activities. Derivative instruments that include non-standard terms, or require an upfront cash payment, or both, often contain a financing element.

Note 2 - Recently Adopted and Issued Accounting Guidance

Recently Adopted Accounting Guidance.

Reference Rate Reform (Topic 848): Facilitation of the Effects of Reference Rate Reform on Financial Reporting (ASU 2020-04). As a part of finalizing the transition of all outstanding LIBOR-indexed instruments to reference SOFR, we adopted certain practical expedients in Topic 848 for qualifying contract modifications related to reference rate reform, including with respect to qualifying hedge relationships. The adoption of this guidance did not have a material impact on the Bank's financial condition, results of operations, or cash flows.

Recently Issued Accounting Guidance.

Segment Reporting (Topic 280): Improvements to Reportable Segment Disclosures (ASU 2023-07). On November 27, 2023, the FASB issued guidance to improve reportable segment disclosures, primarily through requiring enhanced disclosures about significant segment expenses and other segment items included in an entity's reported measure of segment profit and loss.

The guidance is effective for fiscal years beginning after December 15, 2023, and interim periods beginning after December 15, 2024, although early adoption is permitted. Upon adoption, the retrospective application of this guidance will have no effect on our financial condition, results of operations, or cash flows, but will expand our segment disclosures included in *Note 15 - Segment Information.*

Note 3 - Cash and Due from Banks

Compensating Balances. Periodically, we maintain cash balances with commercial banks in return for certain services. These agreements contain no legal restrictions on the withdrawal of funds. The average cash balances for the years ended December 31, 2023, 2022, and 2021 were $9,129, $104,501, and $227,913, respectively.

Note 4 - Investments

Short-term Investments. We invest in interest-bearing deposits, securities purchased under agreements to resell, and federal funds sold to provide short-term liquidity. At December 31, 2023 and 2022, 97% and 96%, respectively, of these investments, based on amortized cost, were with counterparties rated by an NRSRO as investment grade (BBB or higher). The remaining investments were with unrated counterparties. The NRSRO ratings may differ from any internal ratings of the investments, if applicable.

Allowance for Credit Losses.

Interest-Bearing Deposits. Interest-bearing deposits are considered overnight investments given our ability to withdraw funds from these accounts at any time. At December 31, 2023 and 2022, based on our evaluations, no allowance for credit losses on any of these investments was deemed necessary

Securities Purchased Under Agreements to Resell. We use the collateral maintenance provision with our counterparties as a practical expedient for securities purchased under agreements to resell whereby a credit loss is recognized only if there is a collateral shortfall which we do not believe the counterparty is willing or able to replenish in accordance with the contractual terms. The credit loss would be limited to the difference between the estimated fair value of the collateral and the investment's amortized cost. At December 31, 2023 and 2022, based upon the collateral held as security and collateral maintenance provisions with our counterparties, no allowance for credit losses was deemed necessary for securities purchased under agreements to resell.

Federal Funds Sold. As our investments in federal funds sold are typically transacted on an overnight term, we would only evaluate these instruments for expected credit losses if they were not repaid according to their contractual terms at maturity. At December 31, 2023 and 2022, all investments in federal funds sold were repaid according to their contractual terms and, therefore, no allowance for credit losses was deemed necessary.

($ amounts in thousands unless otherwise indicated)

Investment Securities.

Trading Securities.

Major Security Types. The following table presents our trading securities by type of security.

Security Type	December 31, 2023	December 31, 2022
U.S. Treasury obligations	$ 600,063	$ 2,230,248
Total trading securities at estimated fair value	$ 600,063	$ 2,230,248

Net Gains (Losses) on Trading Securities. The following table presents net gains (losses) on trading securities, excluding any offsetting effect of gains (losses) on the associated derivatives.

	Years Ended December 31,		
	2023	2022	2021
Net gains (losses) on trading securities held at year end	$ 11,534	$ (18,461)	$ (17,608)
Net gains (losses) on trading securities that matured/sold during the year	8,082	(4,113)	(29,706)
Net gains (losses) on trading securities	$ 19,616	$ (22,574)	$ (47,314)

Available-for-Sale Securities.

Major Security Types. The following table presents our AFS securities by type of security.

	December 31, 2023			
Security Type	Amortized Cost [(1)]	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. Treasury obligations	$ 5,708,713	$ 738	$ (12,595)	$ 5,696,856
GSE and TVA debentures	1,792,310	14,628	—	1,806,938
GSE multifamily MBS	6,753,080	7,571	(70,119)	6,690,532
Total AFS securities	$ 14,254,103	$ 22,937	$ (82,714)	$ 14,194,326

	December 31, 2022			
Security Type	Amortized Cost [(1)]	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
U.S. Treasury obligations	$ 4,207,974	$ 3,502	$ (1,802)	$ 4,209,674
GSE and TVA debentures	1,882,802	20,144	(243)	1,902,703
GSE multifamily MBS	6,099,000	20,064	(51,604)	6,067,460
Total AFS securities	$ 12,189,776	$ 43,710	$ (53,649)	$ 12,179,837

(1) Includes adjustments made to the cost basis for purchase discount or premium and related accretion or amortization, and, if applicable, fair-value hedging basis adjustments. At December 31, 2023 and 2022, net unamortized discounts totaled $(278,669) and $(294,587), respectively, and the applicable fair-value hedging basis adjustments totaled net losses of $(778,882) and $(1,099,886), respectively. Excludes accrued interest receivable at December 31, 2023 and 2022 of $72,005 and $53,358, respectively.

($ amounts in thousands unless otherwise indicated)

Unrealized Loss Positions. The following table presents our impaired AFS securities (i.e., in an unrealized loss position), aggregated by major security type and length of time that individual securities have been in a continuous unrealized loss position.

	December 31, 2023					
	Less than 12 months		12 months or more		Total	
Security Type	**Estimated Fair Value**	**Unrealized Losses**	**Estimated Fair Value**	**Unrealized Losses**	**Estimated Fair Value**	**Unrealized Losses**
U.S. Treasury obligations	$ 4,785,547	$ (11,716)	$ 239,902	$ (879)	$ 5,025,449	$ (12,595)
GSE multifamily MBS	2,163,506	(14,970)	2,982,742	(55,149)	5,146,248	(70,119)
Total impaired AFS securities	$ 6,949,053	$ (26,686)	$ 3,222,644	$ (56,028)	$10,171,697	$ (82,714)

	December 31, 2022					
	Less than 12 months		12 months or more		Total	
Security Type	**Estimated Fair Value**	**Unrealized Losses**	**Estimated Fair Value**	**Unrealized Losses**	**Estimated Fair Value**	**Unrealized Losses**
U.S. Treasury obligations	$ 1,836,099	$ (1,802)	$ —	$ —	$ 1,836,099	$ (1,802)
GSE and TVA debentures	75,024	(243)	—	—	75,024	(243)
GSE multifamily MBS	3,484,309	(41,046)	301,339	(10,558)	3,785,648	(51,604)
Total impaired AFS securities	$ 5,395,432	$ (43,091)	$ 301,339	$ (10,558)	$ 5,696,771	$ (53,649)

Contractual Maturity. The amortized cost and estimated fair value of our non-MBS AFS securities are presented below by contractual maturity. MBS are not presented by contractual maturity because their actual maturities will likely differ from their contractual maturities as borrowers have the right to prepay their obligations with or without prepayment fees.

	December 31, 2023		December 31, 2022	
Year of Contractual Maturity	**Amortized Cost**	**Estimated Fair Value**	**Amortized Cost**	**Estimated Fair Value**
Non-MBS:				
Due in 1 year or less	$ 305,208	$ 306,380	$ 131,329	$ 131,517
Due after 1 year through 5 years	4,628,067	4,636,683	1,575,581	1,594,583
Due after 5 years through 10 years	2,567,748	2,560,731	4,383,866	4,386,277
Total non-MBS	7,501,023	7,503,794	6,090,776	6,112,377
Total MBS	6,753,080	6,690,532	6,099,000	6,067,460
Total AFS securities	$14,254,103	$14,194,326	$12,189,776	$12,179,837

Realized Gains and Losses. During the year ended December 31, 2023, for strategic and economic reasons, we sold a portion of our AFS securities. Proceeds from the sales totaled $592,660, resulting in a net realized losses, excluding swap termination fees received, of $(6,710) determined by the specific identification method. There were no sales during the years ended December 31, 2022 or 2021.

Allowance for Credit Losses. At December 31, 2023 and 2022, 100% of our AFS securities were rated single-A, or above, by an NRSRO, based on the lowest long-term credit rating for each security. The NRSRO ratings may differ from any internal ratings of the securities, if applicable.

We individually evaluate our AFS securities for impairment. Impairment exists when the estimated fair value of the investment is less than its amortized cost (i.e., in an unrealized loss position). In assessing whether a credit loss exists on an impaired security, we consider whether there could be a shortfall in receiving all cash flows that are contractually due by evaluating several qualitative factors. In those instances where we determine a shortfall could exist, we compare the present value of cash flows to be collected from the security to its amortized cost. If the present value of cash flows is less than amortized cost, an allowance for credit losses is recorded, but the allowance is limited to the amount of the unrealized loss.

($ amounts in thousands unless otherwise indicated)

If we do not intend to sell an impaired AFS security and it is not more likely than not that we will be required to sell the security before recovery of its amortized cost basis, net of the allowance for credit losses, any difference between the security's estimated fair value and net amortized cost is recorded to net unrealized gains (losses) on AFS securities within OCI. If we intend to sell an impaired AFS security, or more likely than not we will be required to sell the security before recovery of its amortized cost basis, any allowance for credit losses is reversed and the amortized cost is written down to the security's estimated fair value at the reporting date with any such impairment reported in earnings.

At December 31, 2023 and 2022, certain of our AFS securities were in an unrealized loss position; however, no allowance for credit losses was deemed necessary because those losses were considered temporary and recovery of the entire amortized cost basis on these securities at maturity was expected based upon the following qualitative factors: (i) all securities were highly-rated, (ii) we have not experienced, nor do we expect, any payment defaults on the securities, (iii) the U.S., GSE, and other Agency obligations carry an explicit or implicit government guarantee such that we consider the risk of nonpayment to be zero, and (iv) we had no intention of selling any of these securities nor did we consider it more likely than not that we will be required to sell any of these securities before recovery of each security's remaining amortized cost basis.

Held-to-Maturity Securities.

Major Security Types. The following table presents our HTM securities by type of security.

	December 31, 2023			
Security Type	**Amortized Cost** [(1)]	**Gross Unrecognized Holding Gains**	**Gross Unrecognized Holding Losses**	**Estimated Fair Value**
MBS:				
Other U.S. obligations - guaranteed single-family	$ 4,009,493	$ 1,836	$ (39,223)	$ 3,972,106
GSE single-family	683,944	1,454	(36,334)	649,064
GSE multifamily	563,366	—	(5,137)	558,229
Total HTM securities	$ 5,256,803	$ 3,290	$ (80,694)	$ 5,179,399

	December 31, 2022			
Security Type	**Amortized Cost** [(1)]	**Gross Unrecognized Holding Gains**	**Gross Unrecognized Holding Losses**	**Estimated Fair Value**
MBS:				
Other U.S. obligations - guaranteed single-family	$ 2,991,702	$ 2,128	$ (43,106)	$ 2,950,724
GSE single-family	619,910	518	(39,634)	580,794
GSE multifamily	628,589	—	(3,889)	624,700
Total HTM securities	$ 4,240,201	$ 2,646	$ (86,629)	$ 4,156,218

(1) Carrying value equals amortized cost, which includes adjustments made to the cost basis for purchase discount or premium and related accretion or amortization. Net unamortized premium at December 31, 2023 and 2022 totaled $21,942 and $26,125, respectively.

Contractual Maturity. HTM securities are not presented by contractual maturity because they consisted entirely of MBS, whose actual maturities will likely differ from their contractual maturities as borrowers have the right to prepay their obligations with or without prepayment fees.

Realized Gains and Losses. During the years ended December 31, 2023 and 2022, we sold a portion of our HTM MBS for which we had previously collected at least 85% of the principal outstanding at the time of acquisition. As such, the sales were considered maturities for purposes of security classification. Proceeds from the sales totaled $9,769 and $69,919, respectively, resulting in net realized losses of $(71) and $(1,059), respectively, determined by the specific identification method.

($ amounts in thousands unless otherwise indicated)

Allowance for Credit Losses. At December 31, 2023 and 2022, 100% of our HTM securities were rated single-A, or above, by an NRSRO, based on the lowest long-term credit rating for each security. The NRSRO ratings may differ from any internal ratings of the securities, if applicable.

Our HTM securities are evaluated for expected credit losses on a collective, or pooled, basis unless an individual assessment is deemed necessary, e.g. the securities do not possess similar risk characteristics. We consider several qualitative factors when evaluating the potential for credit losses on our HTM securities and, if deemed necessary, an allowance for credit losses is recorded.

At December 31, 2023 and 2022, based on our evaluation, no allowance for credit losses on any of our HTM securities was deemed necessary based on the following qualitative factors: (i) all securities were highly-rated, (ii) we have not experienced, nor do we expect, any payment defaults on the securities, and (iii) the U.S., GSE, and other Agency obligations carry an explicit or implicit government guarantee such that we consider the risk of nonpayment to be zero.

Note 5 - Advances

We offer a wide range of fixed- and adjustable-rate advance products with various maturities, interest rates, payment characteristics and optionality. Adjustable-rate advances have interest rates that reset periodically at a fixed spread to SOFR or another specified index.

The following table presents our advances outstanding by redemption term.

	December 31, 2023		December 31, 2022	
Redemption Term	**Amount**	**WAIR %**	**Amount**	**WAIR %**
Overdrawn demand and overnight deposit accounts	$ 2	7.76	$ 430	6.74
Due in 1 year or less	9,780,116	4.88	14,517,059	3.77
Due after 1 year through 2 years	4,362,389	3.33	2,726,023	2.82
Due after 2 years through 3 years	2,683,356	3.25	3,316,683	2.73
Due after 3 years through 4 years	4,573,456	4.37	2,045,370	2.70
Due after 4 years through 5 years	5,531,135	4.30	3,938,017	3.96
Thereafter	8,946,614	3.44	10,747,880	2.70
Total advances, par value	35,877,068	4.06	37,291,462	3.26
Fair-value hedging basis adjustments, net	(319,721)		(615,859)	
Unamortized swap termination fees associated with modified advances, net of deferred prepayment fees	4,497		6,856	
Total advances [(1)]	$ 35,561,844		$ 36,682,459	

(1) Carrying value equals amortized cost, which excludes accrued interest receivable at December 31, 2023 and 2022 of $63,775 and $50,446, respectively.

We offer our members certain advances that provide them the right, at predetermined future dates, to call (i.e., prepay) the advance prior to maturity without incurring prepayment or termination fees. We also offer certain adjustable-rate advances that may be contractually prepaid by the borrower at the interest-rate reset date without incurring prepayment or termination fees. All other advances may only be prepaid by paying a fee that is sufficient to make us financially indifferent to the prepayment of the advance.

We also offer putable advances. Under the terms of a putable advance, we retain the right to extinguish or put the fixed-rate advance to the member on predetermined future dates and offer replacement funding at current market rates, subject to certain conditions.

($ amounts in thousands unless otherwise indicated)

The following table presents our advances outstanding by the earlier of the redemption date or the next call date and next put date.

	Earlier of Redemption or Next Call Date		Earlier of Redemption or Next Put Date	
	December 31,		December 31,	
Term	**2023**	**2022**	**2023**	**2022**
Overdrawn demand and overnight deposit accounts	$ 2	$ 430	$ 2	$ 430
Due in 1 year or less	14,901,928	19,337,582	13,910,616	20,226,164
Due after 1 year through 2 years	3,641,289	2,299,023	5,102,289	3,207,023
Due after 2 years through 3 years	2,370,466	2,385,483	3,581,356	4,082,583
Due after 3 years through 4 years	3,328,746	1,592,245	4,808,556	2,045,370
Due after 4 years through 5 years	4,502,482	2,773,917	4,661,135	4,173,117
Thereafter	7,132,155	8,902,782	3,813,114	3,556,775
Total advances, par value	$ 35,877,068	$ 37,291,462	$ 35,877,068	$ 37,291,462

Advance Concentrations. At December 31, 2023 and 2022, our top borrower held 12% of total advances outstanding at par and our top five borrowers held 35% and 41%, respectively.

Allowance for Credit Losses. Advances are evaluated for expected credit losses on a collective, or pooled, basis unless an individual assessment is deemed necessary, e.g. the advances do not possess similar risk characteristics.

Using a risk-based approach, we consider the amount and quality of the collateral pledged and the borrower's financial condition to be the primary indicators of an advance's credit quality. We manage our exposure to advances outstanding through an integrated approach that generally includes establishing a credit limit for each borrower, and an ongoing review of each borrower's financial condition, coupled with conservative collateral/lending policies intended to limit the risk of loss while balancing the borrower's needs for a reliable source of funding. In addition, we lend to eligible borrowers in accordance with federal statutes and Finance Agency regulations. Specifically, we comply with the Bank Act, which requires us to obtain sufficient collateral to fully secure credit products. We evaluate and update our collateral guidelines, as necessary, based on current market conditions.

We accept certain investment securities, residential mortgage loans, deposits, and other real estate-related assets as collateral. In addition, certain members that qualify as CFIs are eligible to utilize expanded statutory collateral provisions for small business and agriculture loans. Under the Bank Act, our capital stock owned by our members serves as additional security. Collateral arrangements may vary depending upon borrower credit quality, financial condition and performance; borrowing capacity; and overall credit exposure to the borrower. As part of our risk-based approach, we also evaluate and determine whether a borrower may retain physical possession of the collateral pledged to us or must specifically deliver the collateral to us or our document custody agent.

Our evaluation of credit losses on advances utilizes a framework that considers the adequacy of the advances' associated collateral and the associated member's willingness and ability to pledge additional collateral to satisfy any current or anticipated future deficiency. Our agreements with borrowers allow us, at any time and in our sole discretion, to require substitution of collateral, adjust the over-collateralization requirements applied to collateral, or refuse to make extensions of credit against any collateral. We also may require borrowers to pledge additional collateral regardless of whether the collateral would be eligible to originate a new extension of credit. Our agreements with our borrowers also afford us the right, in our sole discretion, to declare any borrower to be in default if we deem the Bank to be inadequately secured.

We determine the estimated value of the collateral required to secure each member's advances by applying collateral discounts, or haircuts, to the market value or UPB of the collateral, as applicable. At December 31, 2023 and 2022, we had rights to collateral on a borrower-by-borrower basis with an estimated lendable value equal to or in excess of our advances outstanding.

At December 31, 2023 and 2022, we did not have any advances that were past due, on non-accrual status, or considered impaired. In addition, there were no modifications related to advances to borrowers experiencing financial difficulties during the year ended December 31, 2023 and no troubled debt restructurings for the years ended December 31, 2022 or 2021.

($ amounts in thousands unless otherwise indicated)

At December 31, 2023 and 2022, based upon the collateral held as security, our credit extension and collateral policies, our credit extension and collateral policies, our credit analysis and the repayment history on advances, no allowance for credit losses on advances was deemed necessary.

Note 6 - Mortgage Loans Held for Portfolio

Mortgage loans held for portfolio consist substantially of residential loans acquired from our members through the MPP. The mortgage loans are fixed-rate and either credit enhanced by PFIs, if conventional, or guaranteed or insured by government agencies.

The following tables present information on our mortgage loans held for portfolio by term and type.

Term	December 31, 2023	December 31, 2022
Fixed-rate long-term mortgages	$ 7,711,709	$ 6,676,752
Fixed-rate medium-term [1] mortgages	740,859	856,446
Total mortgage loans held for portfolio, UPB	8,452,568	7,533,198
Unamortized premiums	179,499	168,593
Unamortized discounts	(11,844)	(9,466)
Hedging basis adjustments, net	(6,254)	(5,670)
Total mortgage loans held for portfolio	8,613,969	7,686,655
Allowance for credit losses	(125)	(200)
Total mortgage loans held for portfolio, net [2]	$ 8,613,844	$ 7,686,455

(1) Defined as a term of 15 years or less at origination.
(2) Excludes accrued interest receivable at December 31, 2023 and 2022 of $41,403 and $30,396, respectively.

Type	December 31, 2023	December 31, 2022
Conventional	$ 8,298,188	$ 7,383,168
Government-guaranteed or -insured	154,380	150,030
Total mortgage loans held for portfolio, UPB	$ 8,452,568	$ 7,533,198

Conventional MPP. Our management of credit risk considers the several layers of loss protection that are defined in our agreements with the PFIs. Our loss protection consists of the following loss layers, in order of priority, (i) borrower equity; (ii) PMI up to coverage limits (when applicable for the acquisition of mortgages with an initial LTV ratio of over 80% at the time of purchase); (iii) available funds remaining in the LRA; and (iv) SMI coverage (as applicable) purchased by the seller from a third-party provider naming the Bank as the beneficiary, up to the policy limits. Any losses not absorbed by the loss protection are borne by the Bank.

Government-Guaranteed or -Insured Mortgage Loans. These fixed-rate mortgage loans are guaranteed or insured by the FHA, Department of Veterans Affairs, Rural Housing Service of the Department of Agriculture, or United States Department of Housing and Urban Development. The servicer provides and maintains a guaranty or insurance from the applicable government agency. The servicer is responsible for compliance with all government agency requirements and for obtaining the benefit of the applicable guaranty or insurance with respect to defaulted government-guaranteed or -insured mortgage loans. Any losses incurred on these loans that are not recovered from the insurer or guarantor are absorbed by the servicers.

($ amounts in thousands unless otherwise indicated)

Credit Quality Indicators for Conventional Mortgage Loans and Other Delinquency Statistics. Payment status is the key credit quality indicator for conventional mortgage loans and allows us to monitor the migration of past due loans. Past due loans are those where the borrower has failed to make timely payments of principal and/or interest in accordance with the terms of the loan. Other delinquency statistics include non-accrual loans and loans in process of foreclosure.

The tables below present the key credit quality indicators and other delinquency statistics for our mortgage loans held for portfolio aggregated by (i) the most recent five origination years and (ii) all other prior origination years. Amounts are based on amortized cost, which excludes accrued interest receivable.

	December 31, 2023		
	Origination Year		
Payment Status	**Prior to 2019**	**2019 to 2023**	**Total**
Past due:			
30-59 days	$ 20,204	$ 26,731	$ 46,935
60-89 days	3,097	4,698	7,795
90 days or more	5,206	1,364	6,570
Total past due	28,507	32,793	61,300
Total current	2,391,451	6,004,929	8,396,380
Total conventional mortgage loans, amortized cost	$ 2,419,958	$ 6,037,722	$ 8,457,680

	December 31, 2022		
	Origination Year		
Payment Status	**Prior to 2018**	**2018 to 2022**	**Total**
Past due:			
30-59 days	$ 17,892	$ 13,041	$ 30,933
60-89 days	4,537	1,992	6,529
90 days or more	9,498	2,979	12,477
Total past due	31,927	18,012	49,939
Total current	2,422,623	5,062,416	7,485,039
Total conventional mortgage loans, amortized cost	$ 2,454,550	$ 5,080,428	$ 7,534,978

($ amounts in thousands unless otherwise indicated)

	December 31, 2023		
Other Delinquency Statistics	**Conventional**	**Government**	**Total**
In process of foreclosure [1]	$ 728	$ —	$ 728
Serious delinquency rate [2]	0.08 %	0.64 %	0.09 %
Past due 90 days or more still accruing interest [3]	$ 2,513	$ 939	$ 3,452
On non-accrual status	$ 7,601	$ —	$ 7,601

	December 31, 2022		
Other Delinquency Statistics	**Conventional**	**Government**	**Total**
In process of foreclosure [1]	$ 1,655	$ —	$ 1,655
Serious delinquency rate [2]	0.16 %	1.07 %	0.18 %
Past due 90 days or more still accruing interest [3]	$ 6,283	$ 1,552	$ 7,835
On non-accrual status	$ 10,984	$ —	$ 10,984

(1) Includes loans for which the decision of foreclosure or similar alternative, such as pursuit of deed-in-lieu of foreclosure, has been reported. Loans in process of foreclosure are included in past due categories depending on their delinquency status, but are not necessarily considered to be on non-accrual status.

(2) Represents loans 90 days or more past due (including loans in process of foreclosure) expressed as a percentage of the respective amount of mortgage loans outstanding. The total rate is a weighted-average rate. The percentage excludes principal and interest amounts previously paid in full by the servicers on conventional loans that are pending resolution of potential loss claims. Our servicers repurchase seriously delinquent government loans, including FHA loans, when certain criteria are met.

(3) Although our past due scheduled/scheduled MPP loans are classified as loans past due 90 days or more based on the loan's delinquency status, we do not consider these loans to be on non-accrual status as they are well-secured and in the process of collection.

Allowance for Credit Losses. We apply a systematic approach for estimating expected credit losses on our conventional mortgage loans over their estimated remaining lives through analyses that include, among other considerations, various loan portfolio and collateral-related characteristics, past loan performance, historical and current economic conditions, and reasonable and supportable forecasts of expected economic conditions.

We estimate expected losses on our conventional mortgage loans on a collective basis, pooling loans with similar risk characteristics. If a mortgage loan no longer shares risk characteristics with other loans, it is removed from the pool and evaluated for expected losses on an individual basis. In addition, we individually evaluate any remaining exposure to delinquent conventional MPP loans paid in full by servicers and collateral-dependent loans.

Loans are considered collateral-dependent when a borrower is experiencing financial difficulty and repayment is expected to be substantially through the sale of the underlying collateral. We estimate expected losses on collateral-dependent loans by applying a practical expedient that considers the expected loss of a collateral-dependent loan to be equal to the difference between the amortized cost of the loan and the estimated fair value of the collateral, less estimated selling costs.

When determining the allowance for credit losses, we consider how credit enhancements are expected to mitigate credit losses and then reduce the allowance accordingly because the credit enhancements are entered into in conjunction with the purchase of a loan and cannot be both legally detached and separately exercised.

($ amounts in thousands unless otherwise indicated)

Collectively Evaluated Mortgage Loans. Conventional loans current to 179 days past due are collectively evaluated at the pool level using a recognized third-party credit and prepayment model, which considers both historical and current information and events and reasonable and supportable forecasts that rely upon certain key inputs and assumptions, to estimate potential ranges of credit loss exposure over the estimated lives of the loans. One such key input is a 3-year forecast of housing prices with a 2-year gradual transition to full reversion to historical inputs after 5 years. Additionally, the evaluation is based upon distinct underlying loan characteristics, including loan vintage (year of origination), geographic location, credit support features and other factors, and a projected migration of loans through the various stages of delinquency.

Seriously delinquent conventional loans 180 days or more past due and not charged-off are also collectively evaluated at the pool level based on loan-specific attribution data, including the use of loan-level property values from a third-party.

Qualitative Factors. We also assess multiple qualitative factors in our estimation of credit losses. These factors represent a subjective management judgment based on facts and circumstances that exist as of the reporting date that are not ascribed to any specific measurable economic or credit event and therefore may not otherwise be captured in our methodology.

Rollforward of Allowance for Credit Losses. The table below presents a rollforward of our allowance for credit losses.

Rollforward of Allowance	2023	2022	2021
Balance, beginning of year	$ 200	$ 200	$ 350
(Charge-offs), net of recoveries	145	74	(42)
Reversal of credit losses	(220)	(74)	(108)
Balance, end of year	$ 125	$ 200	$ 200

Government-Guaranteed or -Insured Mortgage Loans. Based on the U.S. government guarantee or insurance on these loans, our assessment of our servicers, and the collateral backing the loans, we did not record an allowance for credit losses for government-guaranteed or -insured mortgage loans at December 31, 2023 or 2022. Furthermore, none of these mortgage loans have been placed on non-accrual status due to the U.S. government guarantee or insurance on these loans and the contractual obligation of the loan servicer to repurchase the loans when certain criteria are met.

Note 7 - Premises, Software and Equipment

The following table presents the types of our premises, software and equipment.

Type	December 31, 2023	December 31, 2022
Premises	$ 14,238	$ 14,768
Computer software	53,230	51,601
Equipment	10,219	12,278
Premises, software and equipment, in service	77,687	78,647
Accumulated depreciation and amortization	(58,670)	(54,068)
Premises, software and equipment, in service, net	19,017	24,579
Capitalized assets in progress	5,543	2,726
Premises, software and equipment, net	$ 24,560	$ 27,305

Depreciation and amortization expense for premises, software and equipment for the years ended December 31, 2023, 2022, and 2021 totaled $8,001, $8,182, and $7,833, respectively, including amortization of computer software costs of $5,690, $5,935, and $5,547, respectively.

Note 8 - Derivatives and Hedging Activities

Nature of Business Activity. We are exposed to interest-rate risk primarily from the effect of changes in market interest rates on our interest-earning assets and on our interest-bearing liabilities that finance those assets. The goal of our interest-rate risk management strategies is not to eliminate interest-rate risk, but to manage it within appropriate limits. To mitigate the risk of loss, we have established policies and procedures, which include guidelines on the extent of exposure to changes in interest rates that we are willing to accept. In addition, we monitor the risk to our interest income, net interest margin and average maturity of interest-earning assets and interest-bearing liabilities.

We use derivative financial instruments when they are the most cost-effective alternative to achieve our financial and risk management objectives. The most common ways in which we use derivatives are to:

- reduce the interest-rate sensitivity and repricing gaps of assets and liabilities;
- protect the value of existing asset and liability positions or of commitments and forecasted transactions;
- mitigate the adverse earnings effects of the shortening or extension of the duration of certain assets (e.g., advances or mortgage assets) and liabilities;
- reduce funding costs by executing a derivative concurrently with the issuance of a consolidated obligation as the cost of a combined funding structure can be lower than the cost of a comparable CO bond;
- preserve a favorable interest-rate spread between the yield of an asset (e.g., an advance) and the cost of the related liability (e.g., CO bond used to fund advance);
- manage embedded options in assets and liabilities; and
- manage our overall asset/liability structure.

We reevaluate our hedging strategies from time to time and, consequently, we may adopt new strategies or change our hedging techniques. However, Finance Agency regulation and our risk management policies prohibit trading in, or the speculative use of, these derivative instruments and limit credit risk arising from these instruments.

We transact most of our derivatives with large banks and major broker-dealers. Some of these banks and broker-dealers or their affiliates buy, sell, and distribute consolidated obligations. We are not a derivatives dealer and thus do not trade derivatives for short-term profit. Derivative transactions may be either executed with a counterparty over-the-counter (uncleared derivatives) or cleared through a Futures Commission Merchant (i.e., clearing agent) with a Clearinghouse (cleared derivatives). Once a derivative transaction has been accepted for clearing by a Clearinghouse, the derivative transaction is novated, and the executing counterparty is replaced by the Clearinghouse.

Types of Derivatives. We use the following types of derivative instruments.

Interest-Rate Swaps. We use interest-rate swaps to hedge the risk of changes in the fair value of certain of our assets and liabilities due to changes in market interest rates. The variable rate we receive or pay in most interest-rate swaps is currently indexed to EFFR or SOFR.

Interest-Rate Cap and Floor Agreements. We use caps and floors to protect against interest rates on variable-rate assets or liabilities rising above or falling below certain levels.

Interest-Rate Swaptions. We utilize payer or receiver swaptions to protect against the adverse effects of sudden increases or decreases in interest rates, respectively.

Forward Contracts. We normally sell TBA MBS or other derivatives for forward settlement to protect against changes in the market values of fixed-rate MDCs resulting from changes in market interest rates.

Types of Hedged Items. We document at inception all relationships between the derivatives designated as hedging instruments and the hedged items, our risk management objectives and strategies for undertaking various hedge transactions, and our method of assessing effectiveness. We have the following types of hedged items:

Investments. We primarily invest in Agency MBS, U.S. Treasury obligations, and GSE and TVA debentures, which may be classified as trading, HTM or AFS securities. The interest-rate, prepayment and duration risks associated with these investment securities are managed through a combination of debt issuance and derivatives. We may manage those risks by funding these investment securities with CO bonds that contain call features. We may also hedge the prepayment risk with caps or floors, callable swaps or swaptions. We may manage the risk and volatility arising from changing market prices of investment securities by matching the cash outflows on the derivatives with the cash inflows on the investment securities. Certain of these derivatives qualify as fair-value hedges while others are designated as economic hedges.

Advances. We offer a wide range of fixed- and adjustable-rate advance products with various maturities, interest rates, payment characteristics, and optionality. We may use derivatives to manage the repricing and/or options characteristics of advances in order to more closely match the characteristics of our funding liabilities. In general, whenever a member executes a fixed-rate advance or an adjustable-rate advance with embedded options, we may simultaneously execute a derivative with terms that offset the terms and embedded options in the advance. For example, we may hedge a fixed-rate advance with an interest-rate swap where we pay a fixed rate and receive a variable rate, effectively converting the fixed-rate advance to an adjustable-rate advance. This type of hedge is typically treated as a fair-value hedge. In addition, we may hedge a callable, prepayable or putable advance by entering into a cancellable interest-rate swap.

Mortgage Loans. We invest in fixed-rate mortgage loans. The prepayment options embedded in these mortgage loans can result in extensions or contractions in the expected repayment of these loans, depending on changes in prepayment speeds. We may purchase interest-rate caps and floors, swaptions, callable swaps, calls, and puts to minimize the prepayment risk embedded in the loans. These derivatives are considered economic hedges against the prepayment risk of the loans, but they are not specifically linked to individual loans.

Consolidated Obligations. We may enter into derivatives to hedge the interest-rate risk associated with our debt issuances. We manage the risk and volatility arising from changing market prices of consolidated obligations by matching the cash inflows on the derivatives with the cash outflows on the consolidated obligations.

In a typical transaction, we issue a fixed-rate consolidated obligation and simultaneously enter into a matching derivative in which the counterparty pays fixed cash flows to us designed to match in timing and amount the cash outflows we pay on the consolidated obligation. In turn, we pay a variable cash flow to the counterparty that closely matches the interest payments we receive on short-term or variable-rate advances. These transactions are typically treated as fair-value hedges. Additionally, we may issue variable-rate CO bonds indexed to SOFR or the United States prime rate and simultaneously execute interest-rate swaps to hedge the basis risk of the variable-rate debt.

Firm Commitments. In connection with our purchases of mortgage loans, we enter into MDCs. Certain MDCs entered into by us are considered derivatives. The MDC and the TBA used in the firm commitment hedging strategy are treated as an economic hedge and are marked to fair value through earnings. When the MDC settles, the current fair value of the commitment is included with the basis of the mortgage loan and amortized accordingly.

Managing Credit Risk on Derivatives. We are subject to credit risk due to the risk of nonperformance by the counterparties to our derivative transactions. We manage counterparty credit risk through credit analysis, collateral requirements and adherence to the requirements set forth in our policies, the United States Commodity Futures Trading Commission regulations, and Finance Agency regulations.

Uncleared Derivatives. For uncleared derivatives, the degree of credit risk depends on the extent to which master netting arrangements are included in such contracts to mitigate the risk. We require collateral agreements with our uncleared derivatives.

During the year ended December 31, 2023, we became subject to two-way initial margin regulatory requirements for uncleared derivative transactions as our aggregate uncleared derivative exposure to a single counterparty exceeded a specified threshold. Required initial margin must be in the form of non-cash collateral and held at a third-party custodian but such posting does not change ownership of the initial margin. Rather, the counterparty has a security interest in the required initial margin and can only take ownership upon the occurrence of certain events, including an event of default due to bankruptcy, insolvency, or similar proceeding. As a result, at December 31, 2023, our securities pledged as collateral totaled $15,670, which cannot be sold or repledged by the counterparty.

Cleared Derivatives. For cleared derivatives, the Clearinghouse is our counterparty. We use LCH.UK and CME Clearing as Clearinghouses for all cleared derivative transactions. Collateral is required to be posted daily for changes in the value of cleared derivatives to mitigate each counterparty's credit risk. The Clearinghouse notifies the clearing agent of the required initial and variation margin, and the clearing agent notifies us. The requirement that we post initial and variation margin through the clearing agent for the benefit of the Clearinghouse exposes us to institutional credit risk in the event that the clearing agent or Clearinghouse fails to meet its obligations.

At both Clearinghouses, initial margin is considered cash collateral and variation margin is characterized as a daily settlement payment.

The Clearinghouse determines margin requirements which are generally not based on credit ratings. However, clearing agents may require additional margin to be posted by us based on credit considerations, including but not limited to any credit rating downgrades. At December 31, 2023, we were not required by our clearing agents to post any additional margin.

($ amounts in thousands unless otherwise indicated)

Financial Statement Effect and Additional Financial Information.

The notional amount of derivatives serves as a factor in determining periodic interest payments, or cash flows received and paid. The notional amount of derivatives also reflects the extent of our involvement in the various classes of financial instruments but represents neither the actual amounts exchanged nor our overall exposure to credit and market risk; the overall risk is much smaller. The risks of derivatives can be measured meaningfully on a portfolio basis that takes into account the counterparties, the types of derivatives, the items being hedged and any offsets between the derivatives and the hedged items.

We record derivative instruments, related cash collateral received or pledged/posted and associated accrued interest on a net basis, by clearing agent and/or by counterparty when the netting requirements have been met.

The following table presents the notional amount and estimated fair value of our derivative assets and liabilities.

	December 31, 2023			December 31, 2022		
	Notional Amount	Derivative Assets	Derivative Liabilities	Notional Amount	Derivative Assets	Derivative Liabilities
Derivatives designated as hedging instruments:						
Interest-rate swaps	$ 75,336,530	$ 736,648	$ 1,533,144	$ 66,103,220	$ 919,089	$ 2,178,897
Derivatives not designated as hedging instruments:						
Economic hedges:						
Interest-rate swaps	610,000	100	319	6,200,000	599	525
Interest-rate caps/floors	811,000	887	—	611,000	1,310	—
Interest-rate forwards	57,300	—	337	30,200	131	—
MDCs	57,270	207	12	30,855	50	102
Total derivatives not designated as hedging instruments	1,535,570	1,194	668	6,872,055	2,090	627
Total derivatives before adjustments	$ 76,872,100	737,842	1,533,812	$ 72,975,275	921,179	2,179,524
Netting adjustments and cash collateral [1]		(216,678)	(1,526,872)		(486,758)	(2,160,315)
Total derivatives, net, at estimated fair value		$ 521,164	$ 6,940		$ 434,421	$ 19,209

(1) Represents the application of the netting requirements that allow us to settle (i) positive and negative positions and (ii) cash collateral and related accrued interest held or placed, with the same clearing agent and/or counterparty. Cash collateral pledged to counterparties at December 31, 2023 and 2022, including accrued interest, totaled $1,451,464 and $1,854,876, respectively. Cash collateral received from counterparties and held at December 31, 2023 and 2022, including accrued interest, totaled $141,271 and $181,319, respectively.

($ amounts in thousands unless otherwise indicated)

The following table presents separately the estimated fair value of our derivative instruments meeting and not meeting netting requirements, including the effect of the related collateral.

	December 31, 2023		December 31, 2022	
	Derivative Assets	**Derivative Liabilities**	**Derivative Assets**	**Derivative Liabilities**
Derivative instruments meeting netting requirements:				
Gross recognized amount				
Uncleared	$ 736,071	$ 1,521,576	$ 892,313	$ 2,178,098
Cleared	1,564	11,887	28,685	1,324
Total gross recognized amount	737,635	1,533,463	920,998	2,179,422
Gross amounts of netting adjustments and cash collateral				
Uncleared	(727,850)	(1,514,985)	(884,451)	(2,158,991)
Cleared	511,172	(11,887)	397,693	(1,324)
Total gross amounts of netting adjustments and cash collateral	(216,678)	(1,526,872)	(486,758)	(2,160,315)
Net amounts after netting adjustments and cash collateral				
Uncleared	8,221	6,591	7,862	19,107
Cleared	512,736	—	426,378	—
Total net amounts after netting adjustments and cash collateral	520,957	6,591	434,240	19,107
Derivative instruments not meeting netting requirements [(1)]	207	349	181	102
Total derivatives, net, at estimated fair value	$ 521,164	$ 6,940	$ 434,421	$ 19,209

(1) Includes MDCs and certain interest-rate forwards.

($ amounts in thousands unless otherwise indicated)

The following table presents the impact of our qualifying fair-value hedging relationships on net interest income by hedged item, excluding any offsetting interest income/expense of the associated hedged items.

	Year Ended December 31, 2023			
	Advances	AFS Securities	CO Bonds	Total
Net impact of fair-value hedging relationships on net interest income:				
Net interest settlements on derivatives [1]	$ 578,797	$ 474,849	$ (950,685)	$ 102,961
Net gains (losses) on derivatives [2]	(283,523)	(64,225)	722,878	375,130
Net gains (losses) on hedged items [3]	254,122	(14,754)	(707,220)	(467,852)
Net impact on net interest income	$ 549,396	$ 395,870	$ (935,027)	$ 10,239
Total interest income (expense) recorded in the statement of income [4]	$ 1,942,905	$ 808,400	$ (2,203,964)	$ 547,341

	Year Ended December 31, 2022			
	Advances	AFS Securities	CO Bonds	Total
Net impact of fair-value hedging relationships on net interest income:				
Net interest settlements on derivatives [1]	$ 52,810	$ 58,755	$ (136,188)	$ (24,623)
Net gains (losses) on derivatives [2]	725,919	432,904	(1,909,780)	(750,957)
Net gains (losses) on hedged items [3]	(731,398)	(502,643)	1,900,103	666,062
Net impact on net interest income	$ 47,331	$ (10,984)	$ (145,865)	$ (109,518)
Total interest income (expense) recorded in the statement of income [4]	$ 634,148	$ 285,252	$ (712,038)	$ 207,362

	Year Ended December 31, 2021			
	Advances	AFS Securities	CO Bonds	Total
Net impact of fair-value hedging relationships on net interest income:				
Net interest settlements on derivatives [1]	$ (183,075)	$ (110,510)	$ 103,143	$ (190,442)
Net gains (losses) on derivatives [2]	425,804	303,349	(272,157)	456,996
Net gains (losses) on hedged items [3]	(429,900)	(321,097)	269,447	(481,550)
Net impact on net interest income	$ (187,171)	$ (128,258)	$ 100,433	$ (214,996)
Total interest income (expense) recorded in the statement of income [4]	$ 115,634	$ 99,646	$ (206,429)	$ 8,851

(1) Represents interest income/expense on derivatives in qualifying fair-value hedging relationships. Net interest settlements on derivatives that are not in qualifying fair-value hedging relationships are reported in other income.
(2) Includes increases (decreases) in estimated fair value, price alignment interest and swap termination fees.
(3) Includes increases (decreases) in estimated fair value and amortization of net losses on ineffective and discontinued fair-value hedging relationships.
(4) For advances, AFS securities and CO bonds only.

($ amounts in thousands unless otherwise indicated)

The following table presents the components of our net gains (losses) on derivatives reported in other income.

Type of Hedge	Years Ended December 31, 2023	2022	2021
Net gains (losses) on derivatives not designated as hedging instruments:			
Economic hedges:			
Interest-rate swaps	$ (17,369)	$ 15,731	$ 13,347
Interest-rate caps/floors	(1,746)	233	(36)
Interest-rate forwards	(308)	7,824	3,350
Net interest settlements [1]	20,370	33,391	(9,137)
MDCs	(766)	(8,750)	(3,840)
Net gains (losses) on derivatives in other income	$ 181	$ 48,429	$ 3,684

(1) Relates to derivatives that are not in qualifying fair-value hedging relationships. The interest income/expense of the associated hedged items is recorded in net interest income.

The following table presents the amortized cost of, and the related cumulative basis adjustments on, our hedged items in qualifying fair-value hedging relationships.

	December 31, 2023 Advances	AFS Securities	CO Bonds
Amortized cost of hedged items [1]	$ 21,624,453	$ 14,254,103	$ 36,682,911
Cumulative basis adjustments included in amortized cost:			
For active fair-value hedging relationships [2]	$ (319,721)	$ (1,013,707)	$ (1,410,511)
For discontinued fair-value hedging relationships	—	234,825	—
Total cumulative fair-value hedging basis adjustments on hedged items	$ (319,721)	$ (778,882)	$ (1,410,511)

	December 31, 2022 Advances	AFS Securities	CO Bonds
Amortized cost of hedged items [1]	$ 20,766,832	$ 12,189,776	$ 28,717,246
Cumulative basis adjustments included in amortized cost:			
For active fair-value hedging relationships [2]	$ (615,898)	$ (1,417,774)	$ (2,147,802)
For discontinued fair-value hedging relationships	39	317,888	—
Total cumulative fair-value hedging basis adjustments on hedged items	$ (615,859)	$ (1,099,886)	$ (2,147,802)

(1) Includes the amortized cost of the hedged items in active or discontinued fair-value hedging relationships.
(2) Includes effective and ineffective fair-value hedging relationships. Excludes any offsetting effect of the net estimated fair value of the associated derivatives.

($ amounts in thousands unless otherwise indicated)

Note 9 - Deposit Liabilities

We offer demand and overnight deposits to members and qualifying non-members. In addition, we offer short-term interest-bearing deposit programs to members. A member that services mortgage loans may deposit funds collected in connection with the mortgage loans, pending disbursement of such funds to the owners of the mortgage loans. We classify these items as other deposits.

Demand, overnight, and other deposits pay interest based on a daily interest rate. Time deposits pay interest based on a fixed rate determined at the origination of the deposit.

The following table presents the types of our deposits.

Type	December 31, 2023	December 31, 2022
Interest-bearing:		
Demand and overnight	$ 608,697	$ 571,971
Time	20,100	23,898
Other	14	38
Total interest-bearing	628,811	595,907
Total deposits	$ 628,811	$ 595,907

Note 10 - Consolidated Obligations

Consolidated obligations consist of CO bonds and discount notes. CO bonds may be issued to raise short-, intermediate- and long-term funds for the FHLBanks and are not subject to any statutory or regulatory limits on maturity. Discount notes are issued primarily to raise short-term funds and have original maturities of up to one year. These notes generally sell at less than their face amount and are redeemed at par value when they mature.

The FHLBanks issue consolidated obligations through the Office of Finance as their agent under the oversight of the Finance Agency and the United States Secretary of the Treasury. In connection with each debt issuance, each FHLBank specifies the amount of debt to be issued on its behalf. Each FHLBank records as a liability the specific portion of consolidated obligations issued on its behalf and for which it is the primary obligor.

In addition to being the primary obligor for all consolidated obligations issued on our behalf, we are jointly and severally liable with each of the other FHLBanks for the payment of the principal and interest on all of the FHLBanks' consolidated obligations outstanding. The par values of the FHLBanks' consolidated obligations outstanding at December 31, 2023 and 2022 totaled $1.2 trillion. As provided by the Bank Act and Finance Agency regulations, consolidated obligations are backed only by the financial resources of all FHLBanks.

The Finance Agency, in its discretion, may require any FHLBank to make principal or interest payments due on any consolidated obligation whether or not the consolidated obligation represents a primary liability of that FHLBank. Although an FHLBank has never paid the principal or interest payments due on a consolidated obligation on behalf of another FHLBank, if that event should occur, Finance Agency regulations provide that the paying FHLBank is entitled to reimbursement for any payments made on behalf of another FHLBank and other associated costs, including interest to be determined by the Finance Agency. If, however, the Finance Agency determines that such other FHLBank is unable to satisfy its repayment obligations to the paying FHLBank, then the Finance Agency may allocate the outstanding liability of such other FHLBank among the remaining FHLBanks on a pro-rata basis in proportion to their participation in all outstanding consolidated obligations, or in any other manner it may determine to ensure that the FHLBanks operate in a safe and sound manner. We do not believe that it is probable that we will be asked or required to make principal or interest payments on behalf of another FHLBank.

($ amounts in thousands unless otherwise indicated)

Discount Notes. The following table presents our discount notes outstanding, all of which are due within one year of issuance.

Discount Notes	**December 31, 2023**	**December 31, 2022**
Par value	$ 22,737,397	$ 27,533,665
Unamortized discounts	(115,297)	(145,726)
Unamortized concessions	(263)	(447)
Book value	$ 22,621,837	$ 27,387,492
Weighted average effective interest rate	5.35 %	4.16 %

CO Bonds. CO bonds are issued with either fixed-rate or variable-rate coupon payment terms that may use a variety of indices for interest-rate resets, such as SOFR or the United States prime rate. To meet the specific needs of certain investors in CO bonds, both fixed-rate and variable-rate CO bonds may contain features that result in complex coupon payment terms and call options. When these CO bonds are issued, we may enter into derivatives containing features that offset the terms and embedded options, if any, of the CO bonds.

In addition to CO bonds with fixed-rate or simple variable-rate interest payment terms, step-up CO bonds pay interest at increasing fixed rates for specified intervals over their lives and generally contain provisions enabling us to call them at our option on the step-up dates.

The following table presents the par value of our CO bonds outstanding by interest-rate payment type.

Interest-Rate Payment Type	**December 31, 2023**	**December 31, 2022**
Fixed-rate	$ 45,009,050	$ 36,957,560
Simple variable-rate	3,389,500	2,776,000
Step-up	1,428,500	2,268,500
Total CO bonds, par value	$ 49,827,050	$ 42,002,060

The following table presents our CO bonds outstanding by contractual maturity.

	December 31, 2023		**December 31, 2022**	
Year of Contractual Maturity	**Amount**	**WAIR%**	**Amount**	**WAIR%**
Due in 1 year or less	$ 20,137,240	3.76	$ 10,016,310	3.05
Due after 1 year through 2 years	10,415,280	2.96	8,014,590	1.48
Due after 2 years through 3 years	7,537,350	1.48	6,278,940	1.37
Due after 3 years through 4 years	2,356,530	1.85	7,130,600	1.25
Due after 4 years through 5 years	2,254,120	3.06	2,312,540	1.76
Thereafter	7,126,530	2.81	8,249,080	2.35
Total CO bonds, par value	49,827,050	2.99	42,002,060	1.99
Unamortized premiums	33,792		45,535	
Unamortized discounts	(10,093)		(10,165)	
Unamortized concessions	(8,672)		(7,174)	
Fair-value hedging basis adjustments, net	(1,410,511)		(2,147,802)	
Total CO bonds	$ 48,431,566		$ 39,882,454	

($ amounts in thousands unless otherwise indicated)

CO bonds with call options may be redeemed in whole or in part, at our discretion, on predetermined call dates according to the terms of the offerings. The following tables present the par value of our CO bonds outstanding by call features and the earlier of the year of contractual maturity or next call date.

Call Feature	December 31, 2023	December 31, 2022
Non-callable / non-putable	$ 14,027,225	$ 11,979,560
Callable	35,799,825	30,022,500
Total CO bonds, par value	$ 49,827,050	$ 42,002,060

Year of Contractual Maturity or Next Call Date	December 31, 2023	December 31, 2022
Due in 1 year or less	$ 42,512,740	$ 37,066,810
Due after 1 year through 2 years	4,389,780	1,444,590
Due after 2 years through 3 years	895,850	770,940
Due after 3 years through 4 years	327,530	804,100
Due after 4 years through 5 years	1,051,620	268,540
Thereafter	649,530	1,647,080
Total CO bonds, par value	$ 49,827,050	$ 42,002,060

Note 11 - Affordable Housing Program

The Bank Act requires each FHLBank to establish an AHP, in which the FHLBank provides subsidies in the form of direct grants to members that use the funds to assist in the purchase, construction, or rehabilitation of housing for very low-, low-, and moderate-income households. Annually, the FHLBanks must set aside for the AHP the greater of the aggregate of $100 million or 10% of each FHLBank's net earnings. For purposes of the AHP calculation, net earnings is defined in a Finance Agency Advisory Bulletin as income before assessments, plus interest expense related to MRCS.

Our required AHP expense, based on 10% of our net earnings, is reported separately as AHP assessments on the Statement of Income as a reduction to income before assessments. Voluntary contributions to our AHP are reported within other expenses.

The following table summarizes the activity in our AHP funding obligation.

AHP Activity	2023	2022	2021
Liability at beginning of year	$ 38,170	$ 31,049	$ 34,402
Assessments	43,886	19,876	10,720
Voluntary contributions to AHP	1,863	4,159	—
Subsidy usage, net [(1)]	(15,618)	(16,914)	(14,073)
Liability at end of year	$ 68,301	$ 38,170	$ 31,049

(1) Subsidies disbursed are reported net of returns/recaptures of previously disbursed subsidies.

($ amounts in thousands unless otherwise indicated)

Note 12 - Capital

We are a financial cooperative whose member and former member institutions (or legal successors) own all of our outstanding capital stock. Former members (including certain non-member institutions that own our capital stock as a result of a merger with or acquisition of a member) own our capital stock solely to support credit products or mortgage loans still outstanding on our statement of condition.

Member shares cannot be purchased or sold except between us and our members or, with our written approval, among our members, at the par value of one hundred dollars per share, as mandated by our capital plan and Finance Agency regulation.

Classes of Capital Stock. Our capital plan divides our Class B stock into two sub-series: Class B-1 and Class B-2. Class B-1 stock is held by our members to satisfy their membership stock requirements, while Class B-2 stock is held to satisfy their activity-based stock requirements. A member's Class B-1 stock is reclassified as B-2 as needed to help fulfill the member's activity-based stock requirement, and the member may be required to purchase additional Class B-2 stock to fully meet that requirement. Any excess stock (i.e., the amount of stock held by a member or former member in excess of the stock ownership requirement for that institution) is automatically classified as Class B-1.

The following table presents our capital stock outstanding by sub-series.

Capital Stock Sub-Series	December 31, 2023	December 31, 2022
Class B-1 [(1)]	$ 581,687	$ 535,345
Class B-2 [(2)]	1,703,571	1,587,780
Total Class B	$ 2,285,258	$ 2,123,125

(1) Non-activity-based stock.
(2) Activity-based stock.

Our capital plan also permits the board of directors to authorize the issuance of Class A stock although, as of December 31, 2023, the board of directors had not authorized such issuance. If authorized, a member may elect to purchase Class A stock, rather than Class B-2 stock, to satisfy the member’s activity-based stock requirement, subject to certain restrictions.

Dividends. Our board of directors may, but is not required to, declare and pay dividends on our Class B stock in either cash or capital stock or a combination thereof, as long as we are in compliance with Finance Agency regulations. The amount of the dividend to be paid is based on the average number of shares of each sub-series held by the member during the dividend payment period (applicable quarter).

Our capital plan does not mandate a specific difference between Class B-1 and Class B-2 dividend rates. Rather, the board of directors may declare a dividend rate on Class B-2 stock that is equal to or greater than the rate on Class B-1 stock. The plan also authorizes the board of directors to declare a dividend rate on Class A stock (if issued and outstanding) that is equal to or greater than the rate on Class B-1 stock.

Stock Redemption and Repurchase. In accordance with the Bank Act, our capital stock is considered putable by the member. Members can redeem Class B stock, subject to certain restrictions, by giving five years' written notice. Members can redeem Class A stock, subject to certain restrictions, by giving six months written notice. Any member that withdraws from membership or otherwise has had its membership terminated may not be readmitted as a member for a period of five years from the divestiture date for all capital stock that was held as a condition of membership, as set forth in our capital plan and Finance Agency regulations, unless the member has canceled or revoked its notice of withdrawal prior to the end of the applicable redemption period. This restriction does not apply if the member is transferring its membership from one FHLBank to another on an uninterrupted basis.

($ amounts in thousands unless otherwise indicated)

We are not required to redeem a member's required capital stock until the expiration of the notice of redemption, or until the activity to which the capital stock relates no longer remains outstanding, whichever is later. However, we may repurchase, at our sole discretion, any member's capital stock that exceeds the required minimum amount, subject to significant statutory and regulatory restrictions on our right to repurchase, or obligation to redeem, the outstanding stock. As a result, whether or not a member may have its capital stock repurchased or redeemed will depend, in part, on whether we are in compliance with those restrictions.

A member may cancel or revoke its written notice of redemption or its notice of withdrawal from membership prior to the conclusion of the applicable redemption period. However, our capital plan provides that we may charge a cancellation fee to a member that cancels or revokes its withdrawal notice.

Restricted Retained Earnings. In accordance with our JCEA, we allocate 20% of the Bank's net income each quarter to a separate restricted retained earnings account until the balance of that account, calculated as of the last day of each quarter, equals at least 1% of the average balance of the Bank's outstanding consolidated obligations for the quarter.

Mandatorily Redeemable Capital Stock. When a member withdraws or otherwise attains non-member status, the member's shares are then subject to redemption and become mandatorily redeemable, resulting in a reclassification of the member's capital stock to a liability as MRCS at estimated fair value, which is equal to par value. The following table presents the activity in our MRCS.

MRCS Activity	**2023**	**2022**	**2021**
Liability at beginning of year	$ 372,503	$ 50,422	$ 250,768
Reclassification from capital stock	1,172	329,232	4,730
Redemptions/repurchases	(4,634)	(7,151)	(205,076)
Liability at end of year	$ 369,041	$ 372,503	$ 50,422

The following table presents our MRCS by contractual year of redemption. The year of redemption is the later of (i) the final year of the five-year redemption period, or (ii) the first year in which a non-member no longer has an activity-based stock requirement.

MRCS Contractual Year of Redemption	**December 31, 2023**	**December 31, 2022**
Past contractual redemption date (1)	$ 738	$ 498
Year 1 (2)	15,047	10,048
Year 2	19,179	9,872
Year 3	3,674	19,179
Year 4	329,232	3,674
Year 5	1,171	329,232
Total MRCS	$ 369,041	$ 372,503

(1) Balance represents Class B stock that will not be redeemed until the associated credit products or mortgage loans are no longer outstanding.

(2) Balance at December 31, 2023 and 2022 includes $5,175 and $9,585 of Class B stock held by one captive insurance company whose membership was terminated on February 19, 2021. The stock is not past its contractual redemption date, but will be redeemed as soon as the associated credit products are no longer outstanding.

($ amounts in thousands unless otherwise indicated)

If a member's membership status changes to a non-member during a quarterly dividend period, but not at the beginning or the end of a quarterly period, any dividends for that quarterly period are allocated between distributions from retained earnings for the shares held as capital stock during that period and interest expense for the shares held as MRCS during that period. Therefore, the distributions from retained earnings represent dividends to former members for only the portion of the period that they were members. The amounts recorded to interest expense represent dividends to former members for the portion of that period and subsequent periods that they were not members.

The following table presents the distributions related to our MRCS.

	Years Ended December 31,		
MRCS Distributions	**2023**	**2022**	**2021**
Recorded as interest expense	$ 17,540	$ 2,140	$ 2,601
Recorded as distributions from retained earnings	716	2,067	97
Total	$ 18,256	$ 4,207	$ 2,698

Capital Requirements. We are subject to three capital requirements under our capital plan and Finance Agency regulations:

(i) Risk-based capital. We must maintain at all times permanent capital, defined as Class B stock (including MRCS) and retained earnings, in an amount at least equal to the sum of our credit risk, market risk, and operational risk capital requirements, all of which are calculated in accordance with Finance Agency regulations. The Finance Agency may require us to maintain a greater amount of permanent capital than is required by the risk-based capital requirements as defined.

(ii) Total regulatory capital. We are required to maintain at all times a total capital-to-assets ratio of at least 4%. Total regulatory capital is the sum of permanent capital, any general loss allowance, if consistent with GAAP and not held against specific assets, and other amounts from sources determined by the Finance Agency as available to absorb losses. For regulatory capital purposes, AOCI is not considered capital.

(iii) Leverage capital. We are required to maintain at all times a leverage capital-to-assets ratio of at least 5%. Leverage capital is defined as the sum of (a) permanent capital weighted 1.5 times and (b) all other components of total capital.

As presented in the following table, we were in compliance with these Finance Agency capital requirements at December 31, 2023 and 2022.

	December 31, 2023		December 31, 2022	
Regulatory Capital Requirements	**Required**	**Actual**	**Required**	**Actual**
Risk-based capital	$ 1,277,258	$ 4,186,470	$ 489,240	$ 3,781,992
Total regulatory capital	$ 3,064,336	$ 4,186,470	$ 2,891,351	$ 3,781,992
Total regulatory capital-to-assets ratio	4.00%	5.46%	4.00%	5.23%
Leverage capital	$ 3,830,420	$ 6,279,705	$ 3,614,189	$ 5,672,988
Leverage ratio	5.00%	8.20%	5.00%	7.85%

($ amounts in thousands unless otherwise indicated)

Note 13 - Accumulated Other Comprehensive Income

The following table presents a summary of the changes in the components of our AOCI.

AOCI Rollforward	Unrealized Gains (Losses) on AFS Securities	Pension Benefits	Total AOCI
Balance, December 31, 2020	$ 136,921	$ (31,519)	$ 105,402
OCI before reclassifications:			
Net change in unrealized gains (losses)	15,021	—	15,021
Reclassifications from OCI to net income:			
Pension benefits, net	—	12,635	12,635
Total other comprehensive income	15,021	12,635	27,656
Balance, December 31, 2021	$ 151,942	$ (18,884)	$ 133,058
OCI before reclassifications:			
Net change in unrealized gains (losses)	(161,881)	—	(161,881)
Reclassifications from OCI to net income:			
Pension benefits, net	—	3,032	3,032
Total other comprehensive income (loss)	(161,881)	3,032	(158,849)
Balance, December 31, 2022	$ (9,939)	$ (15,852)	$ (25,791)
OCI before reclassifications:			
Net change in unrealized gains (losses)	(56,547)	—	(56,547)
Reclassifications from OCI to net income:			
Net realized losses from sale of AFS securities	6,709	—	6,709
Pension benefits, net	—	2,097	2,097
Total other comprehensive income (loss)	(49,838)	2,097	(47,741)
Balance, December 31, 2023	$ (59,777)	$ (13,755)	$ (73,532)

Note 14 - Employee Retirement and Deferred Compensation Plans

Qualified Defined Contribution Plan. We participate in a tax-qualified single-employer retirement savings plan. This DC plan covers our employees who meet certain eligibility requirements. The Bank makes a matching contribution equal to a percentage of voluntary employee contributions, subject to certain limitations. In addition, the Bank makes a non-elective contribution to the account of each participant who is not eligible to participate in the Bank's DB plan. During the years ended December 31, 2023, 2022 and 2021, the Bank contributed a total of $2,975, $2,742, and $2,682, respectively.

Qualified Defined Benefit Pension Plan. We participate in a tax-qualified, defined benefit pension plan for financial institutions administered by Pentegra Retirement Services. This DB Plan is treated as a multiemployer plan for accounting purposes but operates as a multiple-employer plan under the Employee Retirement Income Security Act of 1974 and the Internal Revenue Code. As a result, certain multiemployer plan disclosures are not applicable.

Under the DB Plan, contributions made by a participating employer may be used to provide benefits to employees of other participating employers because assets contributed by an employer are not segregated in a separate account or restricted to provide benefits to employees of that employer only. Also, in the event that a participating employer is unable to meet its contribution or funding requirements, the required contributions for the other participating employers (including us) could increase proportionately.

Our DB Plan covers our employees who meet certain eligibility requirements, including an employment date prior to February 1, 2010. The DB Plan operates on a fiscal year from July 1 through June 30 and files one Form 5500 on behalf of all participating employers. The most recent Form 5500 available for the DB Plan is for the plan year ended June 30, 2022. The Bank's contributions did not exceed 5% of the total contributions to the DB Plan by all participating employers for the plan years ended June 30, 2022, 2021 and 2020, respectively. The Employer Identification Number is 13-5645888 and the three digit plan number is 333. There are no collective bargaining agreements in place.

The DB Plan's annual valuation process includes calculating its funded status and separately calculating the funded status of each participating employer. The funded status is calculated as the market value of plan assets divided by the funding target which is equal to 100% of the present value of all benefits accrued, utilizing a discount rate calculation methodology prescribed by the 2012 Moving Ahead for Progress in the 21st Century Act ("MAP-21"). Such methodology continued to result in an otherwise higher discount rate at the plan valuation dates, which resulted in a lower funding target and a higher funded status each year. Over time, the favorable impact of MAP-21 may decline. As permitted by the Employee Retirement Income Security Act of 1974, the DB Plan accepts contributions for the prior plan year up to eight and a half months after the asset valuation date. As a result, the market value of plan assets at the valuation date (July 1) will increase by any subsequent contributions designated for the immediately preceding plan year ended June 30.

($ amounts in thousands unless otherwise indicated)

The following table presents a summary of net pension costs charged to compensation and benefits expense and the DB Plan's funded status.

DB Plan Net Pension Cost and Funded Status	2023	2022	2021
Net pension cost charged to compensation and benefits expense for the year ended December 31[1]	$ 5,754	$ 7,009	$ 5,482
DB Plan funded status as July 1	114 % [a]	119 % [b]	130 %
Our funded status as of July 1	106 %	110 %	126 %

[1] Includes voluntary contributions for the years ended December 31, 2023, 2022 and 2021 of $5,310, $6,301, and $4,112, respectively.

[a] The DB Plan's funded status as of July 1, 2023 is preliminary and may increase because the participating employers are permitted to make designated contributions through March 15, 2024 for the plan year ended June 30, 2023. Any such contributions will be included in the final valuation as of July 1, 2023. The final funded status as of July 1, 2023 will not be available until the Form 5500 for the plan year ended June 30, 2024 is filed (no later than April 2025).

[b] The DB Plan's final funded status as of July 1, 2022 will not be available until the Form 5500 for the plan year ended June 30, 2023 is filed (no later than April 2024).

Nonqualified Defined Benefit Supplemental Retirement Plan. We participate in a nonqualified, single-employer, unfunded supplemental executive retirement plan. This SERP restores all of the defined benefits to participating employees who have had their qualified defined benefits limited by Internal Revenue Service regulations. Because the SERP is a nonqualified unfunded plan, no contributions are required to be made. However, we may elect to make contributions to a related grantor trust that we established to indirectly fund the SERP in order to maintain a desired funding level. Payments of benefits may be made from the related grantor trust or from our general assets.

The following table presents the changes in our SERP benefit obligation.

Change in benefit obligation	2023	2022	2021
Projected benefit obligation at beginning of year	$ 51,916	$ 50,577	$ 58,330
Service cost	1,526	2,127	3,528
Interest cost	1,790	856	1,067
Actuarial (gain) loss	(805)	(1,121)	119
Benefits paid	(196)	(523)	(523)
Settlements	(697)	—	(5,665)
Plan amendment	—	—	(6,279)
Projected benefit obligation at end of year	$ 53,534	$ 51,916	$ 50,577

The actuarial (gain) loss includes the impact of the changes in the discount rate, compensation, mortality, demographics and other components used to calculate the projected benefit obligation at December 31 of each year.

The following table presents the key assumptions used in the actuarial calculations of the benefit obligation.

	December 31,		
	2023	2022	2021
Discount rate	4.69 %	4.86 %	2.29 %
Compensation increases	5.50 %	5.50 %	5.50 %

($ amounts in thousands unless otherwise indicated)

The discount rate represents a weighted average that was determined by a discounted cash-flow approach, which incorporates the timing of each expected future benefit payment. We estimate future benefit payments based on the census data of the SERP's participants, benefit formulas and provisions, and valuation assumptions reflecting the probability of decrement and survival. We then determine the present value of the future benefit payments by using duration-based interest-rate yields from the Financial Times Stock Exchange Pension Discount Curve as of the measurement date, and solving for the single discount rate that produces the same present value of the future benefit payments.

The accumulated benefit obligation for the SERP, which excludes projected future salary increases as of December 31, 2023 and 2022 was $43,264 and $41,457, respectively.

The unfunded benefit obligation is reported in other liabilities. Although there are no plan assets, the assets in the related grantor trust, included as a component of other assets, had a total estimated fair value at December 31, 2023 and 2022 of $53,434 and $46,688, respectively.

The following table presents the components of the net periodic benefit cost for the SERP.

	Years Ended December 31,		
Components	**2023**	**2022**	**2021**
Portion recognized in compensation and benefits:			
Service cost	$ 1,526	$ 2,127	$ 3,528
Total	1,526	2,127	3,528
Portion recognized in other expenses:			
Interest cost	1,790	856	1,067
Amortization of past service credit	(873)	(874)	—
Amortization of net actuarial loss	2,165	2,785	3,706
Accelerated amortization of net actuarial loss due to settlements	—	—	2,769
Total	3,082	2,767	7,542
Total net periodic benefit cost recognized in income before assessments	4,608	4,894	11,070
Pension benefits recognized in OCI:			
Actuarial loss	(805)	(1,121)	119
Amortization of net actuarial loss	(2,165)	(2,785)	(3,706)
Accelerated amortization of net actuarial loss due to settlements	—	—	(2,769)
Past service credit due to plan amendment	—	—	(6,279)
Amortization of past service credit	873	874	—
Net pension benefits recognized in OCI	(2,097)	(3,032)	(12,635)
Net amount recognized as net periodic benefit cost (credit)	$ 2,511	$ 1,862	$ (1,565)

The following table presents the key assumptions used in the actuarial calculations to determine net periodic benefit cost for the SERP.

	Years Ended December 31,		
	2023	**2022**	**2021**
Discount rate [(1)]	4.86 %	2.29 %	2.06 %
Compensation increases	5.50 %	5.50 %	5.50 %

(1) The discount rate for 2021 was 1.54% for the first six months and 2.06% for the last six months.

($ amounts in thousands unless otherwise indicated)

The following table presents the components of the pension benefits reported in AOCI for the SERP.

	December 31, 2023	December 31, 2022
Net actuarial loss	$ (18,287)	$ (21,257)
Past service credit due to plan amendment	4,532	5,405
Net pension benefits reported in AOCI	$ (13,755)	$ (15,852)

The net periodic benefit cost for the SERP, including the net amount to be amortized, for the year ending December 31, 2024 is projected to be approximately $4,407.

The following table presents the estimated future benefit payments reflecting scheduled benefit payments for retired participants and the estimated payments to active participants, based on the form of payment elected by the participant and the actuarial probability of the participant retiring. Actual payments may differ significantly.

For the Years Ending December 31,	
2024	$ 28,957
2025	2,316
2026	2,431
2027	2,730
2028	3,223
2029 - 2033	15,551

Note 15 - Segment Information

We report based on two operating segments:

- Traditional, which consists of credit products (including advances, standby letters of credit, and lines of credit), investments (including federal funds sold, securities purchased under agreements to resell, interest-bearing demand deposit accounts, and investment securities), and correspondent services and deposits; and
- Mortgage loans, which consists substantially of mortgage loans purchased from our members through our MPP.

These segments reflect our two primary mission asset activities and the manner in which they are managed from the perspective of development, resource allocation, product delivery, pricing, credit risk and operational administration. The segments identify the principal ways we provide services to members.

We measure the performance of each segment based upon the net interest spread of the underlying portfolio(s). Therefore, each segment's performance begins with net interest income.

Traditional net interest income is derived primarily from the spread between the interest income earned on advances and investments and the borrowing costs related to those assets, net interest settlements and changes in fair value related to certain interest-rate swaps, and related premium and discount amortization. Traditional also includes the costs related to holding deposits for members and other miscellaneous borrowings. Mortgage loan net interest income is derived primarily from the spread between the interest income earned on mortgage loans, including the premium and discount amortization, and the borrowing costs related to those loans.

Direct other income and expense also affect each segment's results. The traditional segment includes the direct earnings impact of certain derivatives and hedging activities related to advances, investments and consolidated obligations as well as all other miscellaneous income and expense not associated with mortgage loans. The mortgage loans segment includes the direct earnings impact of derivatives and hedging activities as well as direct compensation, benefits and other expenses (including an allocation for indirect overhead) associated with operating the MPP and volume-driven costs associated with master servicing and quality control fees.

The AHP assessments have been allocated to each segment based upon its proportionate share of income before assessments.

($ amounts in thousands unless otherwise indicated)

The following table presents our financial performance by operating segment.

	Year Ended December 31, 2023		
	Traditional	Mortgage Loans	Total
Net interest income	$ 444,474	$ 50,981	$ 495,455
Provision for (reversal of) credit losses	—	(220)	(220)
Other income (loss)	46,588	(693)	45,895
Other expenses	103,662	16,586	120,248
Income before assessments	387,400	33,922	421,322
Affordable Housing Program assessments	40,494	3,392	43,886
Net income	$ 346,906	$ 30,530	$ 377,436

	Year Ended December 31, 2022		
	Traditional	Mortgage Loans	Total
Net interest income	$ 240,361	$ 50,337	$ 290,698
Provision for (reversal of) credit losses	—	(74)	(74)
Other income (loss)	20,101	(657)	19,444
Other expenses	97,158	16,436	113,594
Income before assessments	163,304	33,318	196,622
Affordable Housing Program assessments	16,544	3,332	19,876
Net income	$ 146,760	$ 29,986	$ 176,746

	Year Ended December 31, 2021		
	Traditional	Mortgage Loans	Total
Net interest income	$ 229,505	$ 22,035	$ 251,540
Provision for (reversal of) credit losses	—	(108)	(108)
Other income (loss)	(33,495)	(324)	(33,819)
Other expenses	96,760	16,465	113,225
Income before assessments	99,250	5,354	104,604
Affordable Housing Program assessments	10,185	535	10,720
Net income	$ 89,065	$ 4,819	$ 93,884

We have not symmetrically allocated assets to each segment based upon financial results as it is impracticable to measure the performance of our segments from a total assets perspective. As a result, there is asymmetrical information presented in the tables above including, among other items, the allocation of depreciation without an allocation of the depreciable assets, derivatives and hedging earnings adjustments with no corresponding allocation to derivative assets, if any, and the recording of interest income with no allocation to accrued interest receivable.

The following table presents our asset balances by operating segment.

Date	Traditional	Mortgage Loans	Total
December 31, 2023	$ 67,994,560	$ 8,613,844	$ 76,608,404
December 31, 2022	64,597,325	7,686,455	72,283,780

Note 16 - Estimated Fair Values

We estimate fair value amounts by using available market and other pertinent information and the most appropriate valuation methods. Although we use our best judgment in estimating the fair values of financial instruments, there are inherent limitations in any valuation technique. Therefore, these estimated fair values may not be indicative of the amounts that would have been realized in market transactions at the reporting dates.

Certain estimates of the fair value of financial assets and liabilities are highly subjective and require judgments regarding significant factors such as the amount and timing of future cash flows, prepayment speeds, interest-rate volatility, and the discount rates that appropriately reflect market and credit risks. The use of different assumptions could have a material effect on the fair value estimates.

Fair Value Hierarchy. GAAP establishes a fair value hierarchy and requires us to maximize the use of significant observable inputs and minimize the use of significant unobservable inputs when measuring estimated fair value. The inputs are evaluated, and an overall level for the estimated fair value measurement is determined. This overall level is an indication of the extent of the market observability of the estimated fair value measurement for the asset or liability.

The fair value hierarchy prioritizes the inputs used to measure fair value into three broad levels:

Level 1 Inputs. Quoted prices (unadjusted) for identical assets or liabilities in an active market that we can access on the measurement date. An active market for the asset or liability is a market in which the transactions for the asset or liability occur with sufficient frequency and volume to provide pricing information on an ongoing basis.

Level 2 Inputs. Inputs other than quoted prices within level 1 that are observable inputs for the asset or liability, either directly or indirectly. If the asset or liability has a specified or contractual term, a level 2 input must be observable for substantially the full term of the asset or liability. Level 2 inputs include (i) quoted prices for similar assets or liabilities in active markets; (ii) quoted prices for identical or similar assets or liabilities in markets that are not active; (iii) inputs other than quoted prices that are observable for the asset or liability (e.g., interest rates and yield curves that are observable at commonly quoted intervals and implied volatilities); and (iv) inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 3 Inputs. Unobservable inputs for the asset or liability. Valuations are derived from techniques that use significant assumptions not observable in the market, which include pricing models, discounted cash flow models, or similar techniques.

We review the fair value hierarchy classifications on a quarterly basis. Changes in the observability of the inputs may result in a reclassification of certain assets or liabilities. There were no such reclassifications during the years ended December 31, 2023, 2022, or 2021.

($ amounts in thousands unless otherwise indicated)

The following tables present the carrying value and estimated fair value of each of our financial instruments. The total of the estimated fair values does not represent an estimate of our overall market value as a going concern, which would take into account, among other considerations, future business opportunities and the net profitability of assets and liabilities.

	December 31, 2023					
		Estimated Fair Value				
Financial Instruments	**Carrying Value**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Netting Adjustments** [1]
Assets:						
Cash and due from banks	$ 58,844	$ 58,844	$ 58,844	$ —	$ —	$ —
Interest-bearing deposits	892,049	892,049	892,007	42	—	—
Securities purchased under agreements to resell	6,500,000	6,500,000	—	6,500,000	—	—
Federal funds sold	4,101,000	4,101,000	—	4,101,000	—	—
Trading securities	600,063	600,063	—	600,063	—	—
AFS securities	14,194,326	14,194,326	—	14,194,326	—	—
HTM securities	5,256,803	5,179,399	—	5,179,399	—	—
Advances	35,561,844	35,368,737	—	35,368,737	—	—
Mortgage loans held for portfolio, net	8,613,844	7,940,218	—	7,936,147	4,071	—
Accrued interest receivable	203,809	203,809	—	203,809	—	—
Derivative assets, net	521,164	521,164	—	737,842	—	(216,678)
Grantor trust assets [2]	61,227	61,227	61,227	—	—	—
Liabilities:						
Deposits	628,811	628,811	—	628,811	—	—
Consolidated obligations:						
Discount notes	22,621,837	22,620,613	—	22,620,613	—	—
Bonds	48,431,566	47,570,879	—	47,570,879	—	—
Accrued interest payable	327,237	327,237	—	327,237	—	—
Derivative liabilities, net	6,940	6,940	—	1,533,812	—	(1,526,872)
MRCS	369,041	369,041	369,041	—	—	—

($ amounts in thousands unless otherwise indicated)

	December 31, 2022					
		Estimated Fair Value				
Financial Instruments	**Carrying Value**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Netting Adjustments** [1]
Assets:						
Cash and due from banks	$ 21,161	$ 21,161	$ 21,161	$ —	$ —	$ —
Interest-bearing deposits	856,060	856,060	856,019	41	—	—
Securities purchased under agreements to resell	4,550,000	4,550,000	—	4,550,000	—	—
Federal funds sold	3,148,000	3,148,000	—	3,148,000	—	—
Trading securities	2,230,248	2,230,248	—	2,230,248	—	—
AFS securities	12,179,837	12,179,837	—	12,179,837	—	—
HTM securities	4,240,201	4,156,218	—	4,156,218	—	—
Advances	36,682,459	36,468,949	—	36,468,949	—	—
Mortgage loans held for portfolio, net	7,686,455	6,867,904	—	6,859,956	7,948	—
Accrued interest receivable	152,867	152,867	—	152,867	—	—
Derivative assets, net	434,421	434,421	—	921,179	—	(486,758)
Grantor trust assets [2]	53,166	53,166	53,166	—	—	—
Liabilities:						
Deposits	595,907	595,907	—	595,907	—	—
Consolidated obligations:						
Discount notes	27,387,492	27,387,547	—	27,387,547	—	—
Bonds	39,882,454	38,690,400	—	38,690,400	—	—
Accrued interest payable	162,584	162,584	—	162,584	—	—
Derivative liabilities, net	19,209	19,209	—	2,179,524	—	(2,160,315)
MRCS	372,503	372,503	372,503	—	—	—

(1) Represents the application of the netting requirements that allow us to settle (i) positive and negative positions and (ii) cash collateral and related accrued interest held or placed with the same clearing agent and/or counterparty.
(2) Included in other assets on the statement of condition.

Summary of Valuation Techniques and Significant Inputs. The valuation techniques and significant inputs used to develop our measurement of estimated fair value for assets and liabilities that are measured at fair value on a recurring or non-recurring basis in the Statement Condition are listed below.

Investment Securities - MBS. The estimated fair value incorporates prices from multiple third-party pricing vendors, when available. These pricing vendors use various proprietary models to price MBS. The inputs to those models are derived from various sources, including, but not limited to, benchmark yields, reported trades, dealer estimates, issuer spreads, benchmark securities, bids, offers, and other market-related data.

We conduct reviews of the pricing vendors' processes, methodologies and control procedures to confirm and further augment our understanding of the vendors' prices for our MBS. Each pricing vendor has an established challenge process in place for all MBS valuations, which facilitates resolution of potentially erroneous prices identified by us.

Our valuation technique for estimating the fair values of MBS initially requires the establishment of a "median" price for each security. All prices that are within a specified tolerance threshold of the median price are then included in the "cluster" of prices that are averaged to compute a "default" price. All prices that are outside the threshold (i.e., outliers) are subject to further analysis (including, but not limited to, comparison to prices provided by an additional third-party valuation service, prices for similar securities, and/or non-binding dealer estimates) to determine if an outlier is a better estimate of fair value. If so, then the outlier (or the other price as appropriate) is used as the final price rather than the default price. In all cases, the final price is used to determine the estimated fair value of the security.

As of December 31, 2023 and 2022, we obtained two or three prices for substantially all of our MBS.

Investment Securities - non-MBS. The estimated fair value is determined using market-observable price quotes from third-party pricing vendors, such as the Composite Bloomberg Bond Trader screen, thus falling under the market approach.

Derivative assets/liabilities. We base the estimated fair values of derivatives with similar terms on market prices when available. However, active markets do not exist for many of our derivatives. Consequently, fair values for these instruments are generally estimated using standard valuation techniques such as discounted cash-flow analysis and comparisons to similar instruments. In limited instances, fair value estimates for derivatives are obtained from dealers and are corroborated by using a pricing model and observable market data (e.g., the EFFR/SOFR curves).

A discounted cash flow analysis utilizes market-observable inputs (inputs that are actively quoted and can be validated to external sources). Inputs by class of derivative are as follows:

Interest-rate related:

- EFFR/SOFR curves - to project and discount cash flows for collateralized interest-rate swaps; and
- Volatility assumption - market-based expectations of future interest-rate volatility implied from current market prices for similar options.

TBAs:

- TBA securities prices - market-based prices are determined by coupon, maturity and expected term until settlement.

MDCs:

- TBA securities prices - prices are then adjusted for differences in coupon, average loan rate and seasoning.

The estimated fair values of our derivative assets and liabilities include accrued interest receivable/payable and related cash collateral. The estimated fair values of the accrued interest receivable/payable and cash collateral equal their carrying values due to their short-term nature.

We adjust the estimated fair values of our derivatives for counterparty nonperformance risk, particularly credit risk, as appropriate. We compute our nonperformance risk adjustment by using observable credit default swap spreads and estimated probability default rates applied to our exposure after considering collateral held or placed.

Grantor Trust Assets. Grantor trust assets, included as a component of other assets, are carried at estimated fair value based on quoted market prices as of the last business day of the reporting period.

($ amounts in thousands unless otherwise indicated)

Estimated Fair Value Measurements. The following tables present, by level within the fair value hierarchy, the estimated fair value of our financial assets and liabilities that are recorded at estimated fair value on a recurring or non-recurring basis on our statement of condition.

	December 31, 2023				
Financial Instruments	**Total**	**Level 1**	**Level 2**	**Level 3**	**Netting Adjustments** [1]
Trading securities:					
U.S. Treasury obligations	$ 600,063	$ —	$ 600,063	$ —	$ —
Total trading securities	600,063	—	600,063	—	—
AFS securities:					
U.S. Treasury obligations	5,696,856	—	5,696,856	—	—
GSE and TVA debentures	1,806,938	—	1,806,938	—	—
GSE multifamily MBS	6,690,532	—	6,690,532	—	—
Total AFS securities	14,194,326	—	14,194,326	—	—
Derivative assets:					
Interest-rate related	520,957	—	737,635	—	(216,678)
MDCs	207	—	207	—	—
Total derivative assets, net	521,164	—	737,842	—	(216,678)
Other assets:					
Grantor trust assets	61,227	61,227	—	—	—
Total assets at recurring estimated fair value	$ 15,376,780	$ 61,227	$ 15,532,231	$ —	$ (216,678)
Derivative liabilities:					
Interest-rate related	$ 6,928	$ —	$ 1,533,800	$ —	$ (1,526,872)
MDCs	12	—	12	—	—
Total derivative liabilities, net	6,940	—	1,533,812	—	(1,526,872)
Total liabilities at recurring estimated fair value	$ 6,940	$ —	$ 1,533,812	$ —	$ (1,526,872)

($ amounts in thousands unless otherwise indicated)

	December 31, 2022				
Financial Instruments	**Total**	**Level 1**	**Level 2**	**Level 3**	**Netting Adjustments** [1]
Trading securities:					
U.S. Treasury obligations	$ 2,230,248	$ —	$ 2,230,248	$ —	$ —
Total trading securities	2,230,248	—	2,230,248	—	—
AFS securities:					
U.S. Treasury obligations	4,209,674	—	4,209,674	—	—
GSE and TVA debentures	1,902,703	—	1,902,703	—	—
GSE multifamily MBS	6,067,460	—	6,067,460	—	—
Total AFS securities	12,179,837	—	12,179,837	—	—
Derivative assets:					
Interest-rate related	434,371	—	921,129	—	(486,758)
MDCs	50	—	50	—	—
Total derivative assets, net	434,421	—	921,179	—	(486,758)
Other assets:					
Grantor trust assets	53,166	53,166	—	—	—
Total assets at recurring estimated fair value	$ 14,897,672	$ 53,166	$ 15,331,264	$ —	$ (486,758)
Derivative liabilities:					
Interest-rate related	$ 19,107	$ —	$ 2,179,422	$ —	$ (2,160,315)
MDCs	102	—	102	—	—
Total derivative liabilities, net	19,209	—	2,179,524	—	(2,160,315)
Total liabilities at recurring estimated fair value	$ 19,209	$ —	$ 2,179,524	$ —	$ (2,160,315)

(1) Represents the application of the netting requirements that allow us to settle (i) positive and negative positions and (ii) cash collateral and related accrued interest held or placed with the same clearing agent and/or counterparty.

Note 17 - Commitments and Contingencies

The following table presents our off-balance-sheet commitments at their notional amounts.

	December 31, 2023			December 31, 2022
Type of Commitment	**Expire within one year**	**Expire after one year**	**Total**	**Total**
Standby letters of credit outstanding [1]	$ 190,629	$ 321,294	$ 511,923	$ 471,877
Commitments for standby bond purchases	—	184,960	184,960	—
Unused lines of credit - advances [2]	1,196,988	—	1,196,988	1,026,035
Commitments to fund additional advances [3]	5,878	4,087	9,965	464,350
Commitments to purchase mortgage loans, net [4]	57,270	—	57,270	30,855
Unsettled CO bonds, at par	—	—	—	75,000
Unsettled discount notes, at par	—	—	—	5,000

(1) There were no unconditional commitments to issue standby letters of credit.
(2) Maximum line of credit amount per member is $100,000.
(3) Generally for periods up to six months.
(4) Generally for periods up to 91 days.

Commitments to Extend Credit. A standby letter of credit is a financing arrangement between us and one of our members for which we charge the member a commitment fee. If we are required to make a payment for a beneficiary's draw, the payment amount is converted into a collateralized advance to the member. Unearned fees on standby letters of credit are recorded in other liabilities and totaled $8,472 at December 31, 2023. Lines of credit allow members to fund short-term cash needs (up to one year) without submitting a new application for each request for funds.

Liability for Credit Losses. We monitor the creditworthiness of our members that have standby letters of credit and lines of credit. As standby letters of credit and lines of credit are subject to the same collateralization and borrowing limits that apply to advances and are fully collateralized at the time of issuance, we have not recorded a liability for credit losses on these credit products.

Commitments to Purchase Mortgage Loans. Commitments that unconditionally obligate us to purchase mortgage loans are generally for periods not to exceed 91 days. Such commitments are reported as derivative assets or derivative liabilities at their estimated fair value and are reported net of participating interests sold to other FHLBanks.

Pledged Collateral. Cash pledged as collateral to counterparties and clearing agents at December 31, 2023 and 2022 totaled $1,447,218 and $1,849,797, respectively. Securities pledged as collateral to counterparties at December 31, 2023 and December 31, 2022 totaled $15,670 and $0, respectively.

Standby Bond Purchase Agreements. During the year ended December 31, 2023, we entered into multiple agreements with a state housing authority within our district whereby we could be required under the terms of the agreements to purchase and hold the state housing authority's bonds until its designated marketing agent can find a suitable investor or the state housing authority repurchases the bond according to a schedule established by the standby agreements. These standby bond purchase commitments have original expiration periods of up to five years, expiring no later than 2028, although some may be renewable at our option. We had not purchased any bonds under these agreements as of December 31, 2023.

Legal Proceedings. We are subject to legal proceedings arising in the normal course of business. We record an accrual for a loss contingency when it is probable that a loss for which we could be liable has been incurred and the amount can be reasonably estimated. After consultation with legal counsel, management is not aware of any such proceedings where the ultimate liability, if any, could have a material effect on our financial condition, results of operations or cash flows.

Additional discussion of other commitments and contingencies is provided in *Note 5 - Advances; Note 6 - Mortgage Loans Held for Portfolio; Note 8 - Derivatives and Hedging Activities; Note 10 - Consolidated Obligations; Note 12 - Capital;* and *Note 14 - Employee Retirement and Deferred Compensation Plans*.

Note 18 - Related Party and Other Transactions

We are a financial cooperative whose members and former members (or legal successors) own all of our outstanding capital stock. For more information, see *Note 12 - Capital*.

Under GAAP, transactions with related parties include transactions with principal owners, i.e, owners of more than 10% of the voting interests of the entity. Due to the statutory limits on members' voting rights and the number of our members, no shareholder owned more than 10 percent of the total voting interests as of and for the three-year period ended December 31, 2023. Therefore, the Bank had no transactions with principal owners for any of the periods presented.

Under GAAP, transactions with related parties also include transactions with management. Management is defined as persons who are responsible for achieving the objectives of the entity and who have the authority to establish policies and make decisions by which those objectives are to be pursued. For this purpose, management typically includes those who serve on our board of directors.

($ amounts in thousands unless otherwise indicated)

Transactions with Directors Financial Institutions. The Bank provides, in the ordinary course of its business, products and services to members whose officers or directors may also serve as directors of the Bank, i.e., directors' financial institutions. However, Finance Agency regulations require that transactions with directors' financial institutions be made on the same terms as those with any other member. Therefore, all of our transactions with directors' financial institutions are subject to the same eligibility and credit criteria, as well as the same conditions, as comparable transactions with all other members.

The following table presents our transactions with directors' financial institutions, taking into account the beginning and ending dates of the directors' terms, merger activity and other changes in the composition of directors' financial institutions.

	Years Ended December 31,		
Transactions with Directors' Financial Institutions	**2023**	**2022**	**2021**
Net capital stock issuances (redemptions and repurchases)	$ 3,942	$ (33,580)	$ 7,213
Net advances (repayments)	(107,723)	3,850,669	(1,581,708)
Mortgage loan purchases	40,331	17,584	58,830

The following table presents the aggregate balances of capital stock and advances outstanding for our directors' financial institutions and their balances as a percent of the total balances on our statement of condition.

	December 31, 2023		December 31, 2022	
Balances with Directors' Financial Institutions	**Par value**	**% of Total**	**Par value**	**% of Total**
Capital stock	$ 56,763	2 %	$ 49,869	2 %
Advances	753,234	2 %	886,191	2 %

The composition of our directors' financial institutions changed due to changes in board membership on January 1, 2023 resulting from the 2022 board of directors' election and on April 1, 2023 resulting from the board's election of a new director to fill an unexpired term.

Transactions with Members and Former Members. Substantially all advances are made to members, and all whole mortgage loans held for portfolio are purchased from members. We also maintain demand deposit accounts for members, primarily to facilitate settlement activities that are directly related to advances or mortgage loan purchases. Such transactions with members are entered into in the ordinary course of business. In addition, we may purchase investments in federal funds sold, securities purchased under agreements to resell, certificates of deposit, and MBS from members or their affiliates. All purchases are transacted at market prices without preference to the status of the counterparty or the issuer of the security as a member, nonmember, or affiliate thereof.

Under our AHP, we provide subsidies to members, which may be in the form of direct grants or below-market-rate advances. All AHP subsidies are made in the ordinary course of business. Under our Community Investment Program and our Community Investment Cash Advances program, we provide subsidies in the form of below-market-rate advances to members or standby letters of credit to members for community lending and economic development projects. All Community Investment Cash Advances subsidies are made in the ordinary course of business.

Transactions with Other FHLBanks. Occasionally, we loan or borrow short-term funds to/from other FHLBanks in order to manage FHLB System-wide liquidity. These loans and borrowings are transacted at current market rates when traded. There were no loans to or borrowings from other FHLBanks that remained outstanding at December 31, 2023 or 2022.

Transactions with the Office of Finance. Our proportionate share of the cost of operating the Office of Finance is identified in our statement of income. For the determination of our proportionate share, see *Note 1 - Summary of Significant Accounting Policies.*

DEFINED TERMS

advance: Secured loan to member, former member or Housing Associate
AFS: Available-for-Sale
Agency: GSE and Ginnie Mae
AHP: Affordable Housing Program
AMA: Acquired Member Assets
AOCI: Accumulated Other Comprehensive Income (Loss)
Bank Act: Federal Home Loan Bank Act of 1932, as amended
bps: basis points
CDFI: Community Development Financial Institution
CFI: Community Financial Institution, a Federal Deposit Insurance Corporation-insured depository institution with average total assets below an annually- adjusted limit established by the Finance Agency Director based on the Consumer Price Index
CFPB: Bureau of Consumer Financial Protection
Clearinghouse: A United States Commodity Futures Trading Commission-registered derivatives clearing organization
CO bond: Consolidated Obligation bond
DB Plan: Pentegra Defined Benefit Pension Plan for Financial Institutions, as amended
DC Plan: Federal Home Loan Bank of Indianapolis Retirement Savings Plan
DDCP: Directors' Deferred Compensation Plan
EFFR: Effective Federal Funds Rate
Exchange Act: Securities Exchange Act of 1934, as amended
Fannie Mae: Federal National Mortgage Association
FASB: Financial Accounting Standards Board
FHA: Federal Housing Administration
FHLBank: A Federal Home Loan Bank
FHLBanks: The 11 Federal Home Loan Banks or a subset thereof
FHLBank System: The 11 Federal Home Loan Banks and the Office of Finance
FICO®: Fair Isaac Corporation, the creators of the FICO credit score
Finance Agency: Federal Housing Finance Agency
FOMC: Federal Open Market Committee
Form 8-K: Current Report on Form 8-K as filed with the SEC under the Exchange Act
Form 10-K: Annual Report on Form 10-K as filed with the SEC under the Exchange Act
Form 10-Q: Quarterly Report on Form 10-Q as filed with the SEC under the Exchange Act
Freddie Mac: Federal Home Loan Mortgage Corporation
GAAP: Generally Accepted Accounting Principles in the United States of America
Ginnie Mae: Government National Mortgage Association
GSE: United States Government-Sponsored Enterprise
Housing Associate: Approved lender under Title II of the National Housing Act of 1934 that is either a government agency or is chartered under federal or state law with rights and powers similar to those of a corporation
HTM: Held-to-Maturity
JCEA: Joint Capital Enhancement Agreement, as amended, among the 11 FHLBanks
LIBOR: London Interbank Offered Rate
LRA: Lender Risk Account
LTV: Loan-to-Value
MBS: Mortgage-Backed Securities
MCC: Master Commitment Contract
MDC: Mandatory Delivery Commitment
Moody's: Moody's Investor Services
MPP: Mortgage Purchase Program, including Original and Advantage unless indicated otherwise
MRCS: Mandatorily Redeemable Capital Stock
MVE: Market Value of Equity
NEO: Named Executive Officer
NRSRO: Nationally Recognized Statistical Rating Organization
OCI: Other Comprehensive Income (Loss)
PFI: Participating Financial Institution
PMI: Primary Mortgage Insurance
S&P: Standard & Poor's Rating Service
SEC: Securities and Exchange Commission

Securities Act: Securities Act of 1933, as amended
SERP: Collectively, the 2005 FHLBank of Indianapolis Supplemental Executive Retirement Plan, as amended, and the FHLBank of Indianapolis Supplemental Executive Retirement Plan, frozen effective December 31, 2004
SETP: Federal Home Loan Bank of Indianapolis 2016 Supplemental Executive Thrift Plan, as amended and restated
SMI: Supplemental Mortgage Insurance
SOFR: Secured Overnight Financing Rate
TBA: To Be Announced, a forward contract for the purchase or sale of MBS at a future agreed-upon date for an established price
TVA: Tennessee Valley Authority
UPB: Unpaid Principal Balance
WAIR: Weighted-Average Interest Rate

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

None.

ITEM 9A. CONTROLS AND PROCEDURES

We use acronyms and terms throughout this Item that are defined herein or in the *Defined Terms*.

Evaluation of Disclosure Controls and Procedures

We are responsible for establishing and maintaining disclosure controls and procedures that are designed to ensure that information required to be disclosed by us in our reports filed under the Exchange Act is: (a) recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms; and (b) accumulated and communicated to our management, including our principal executive officer, principal financial officer, and principal accounting officer, to allow timely decisions regarding required disclosures.

As of December 31, 2023, we conducted an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer (the principal executive officer), Chief Financial Officer (the principal financial officer) and Chief Accounting Officer (the principal accounting officer), of the effectiveness of the design and operation of our disclosure controls and procedures pursuant to Rule 13a-15 of the Exchange Act. In making this assessment, our management used the criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on that evaluation, our Chief Executive Officer, Chief Financial Officer and Chief Accounting Officer concluded that our disclosure controls and procedures were effective as of December 31, 2023. For Management's Report on Internal Control over Financial Reporting and the Report of Independent Registered Public Accounting Firm, see *Item 8. Financial Statements and Supplementary Data*.

Internal Control Over Financial Reporting

Changes in Internal Control Over Financial Reporting. There were no changes in our internal control over financial reporting, as defined in Rules 13a-15(f) and 15(d)-15(f) of the Exchange Act, that occurred during our most recently completed fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Limitations on the Effectiveness of Controls. We do not expect that our disclosure controls and procedures and other internal controls will prevent all error and fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, have been detected. These inherent limitations include the realities that judgments in decision making can be faulty and that breakdowns can occur because of simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can only be reasonable assurance that any design will succeed in achieving its stated goals under all potential future conditions. Additionally, over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

ITEM 9B. OTHER INFORMATION

None.

ITEM 9C. DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS

None.

ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

We use acronyms and terms throughout this Item that are defined herein or in the *Defined Terms*.

Board of Directors

The Bank Act divides FHLBank directorships into two categories, "member" directorships and "independent" directorships. Both types of directorships are filled by a vote of the members. Elections for member directors are held on a state-by-state basis. Member directors are elected by a plurality vote of the members in their state. Independent directors are elected at-large by all the members in the FHLBank district without regard to the state. No member of management of an FHLBank may serve as a director of an FHLBank or of an FHLBank's member or member's holding company.

Under the Bank Act, member directorships must make up a majority of the board of directors' seats, while the independent directorships must comprise at least 40% of the entire board. A Finance Agency order issued June 5, 2023 provides that we have 15 seats on our board of directors for 2024, consisting of five Indiana member directors, three Michigan member directors, and seven independent directors. The term of office for directors is four years, unless otherwise adjusted by the Director in order to achieve an appropriate staggering of terms, with approximately one-fourth of the directors' terms expiring each year. Directors may not serve more than three consecutive full terms.

Finance Agency regulations permit, but do not require, the board of directors to conduct an annual assessment of the skills and experience possessed by the board as a whole and to determine whether the capabilities of the board would be enhanced through the addition of individuals with particular skills and experience. We may identify those qualifications and inform the voting members as part of our nomination and balloting process; however, by regulation as described below, we may not exclude a member director nominee from the election ballot on the basis of those qualifications. For the 2023 director elections, our board listed in its request for nominations certain desirable candidate attributes and experiences, personal characteristics, and other competencies, but no particular qualifications beyond the eligibility criteria were required as part of the nomination, balloting and election process.

Finance Agency regulations require each FHLBank to develop, implement, and maintain policies and procedures to ensure, to the maximum extent possible in balance with financially safe and sound business practices, the consideration of minorities, women, and individuals with disabilities for employment, and consideration of minority-, women-, and disabled-owned businesses to be engaged for all business and activities. In particular, those regulations require our policies and procedures to (among other things) encourage the consideration of diversity in nominating or soliciting nominees for positions on our board of directors.

Nomination of Member Directors. The Bank Act and Finance Agency regulations require that member director nominees meet certain statutory and regulatory criteria in order to be eligible to be elected and serve as directors. To be eligible, an individual must: (i) be an officer or director of a member institution located in the state in which there is an open member director position; (ii) represent a member institution that is in compliance with the minimum capital requirements established by its regulator; and (iii) be a United States citizen. These are the only eligibility and qualifications criteria that member directors must meet.

Each eligible institution may nominate representatives from member institutions in its state to serve as member directors. Only our shareholders may nominate and elect member directors. Our board of directors is not permitted to nominate or elect member directors, except to fill a vacancy for the remainder of an unexpired term or to fill a vacancy for which no nominations were received. No director, officer, employee, attorney or agent of our Bank (except in his or her personal capacity) may, directly or indirectly, support the nomination or election of a particular individual for a member directorship. Finance Agency regulations do not require member institutions to communicate the reasons for their nominations, and we have no power to require them to do so.

Nomination of Independent Directors. Independent director nominees are also subject to certain statutory and regulatory eligibility criteria. Each independent director must be a United States citizen and a bona fide resident of Michigan or Indiana. The Bank Act and Finance Agency regulations prohibit the nomination, election, or service of an individual as an independent director who is an officer of any FHLBank or is a director, officer, or employee of a member of our FHLBank or an institution that is a recipient of an advance from our FHLBank.

Under the Bank Act, there are two types of independent directors:

- **Public interest directors** - We are required to have at least two public interest directors. Each must have more than four years of experience representing consumer or community interests in banking services, credit needs, housing, or consumer financial protections.
- **Other independent directors** - Independent directors must have demonstrated knowledge or experience in auditing or accounting, derivatives, financial management, organizational management, project development or risk management practices, or other expertise established by Finance Agency regulations.

Before nominating an individual for an independent directorship, other than for a public interest directorship, our board must determine that the nominee's knowledge or experience is commensurate with that needed to oversee a financial institution with a size and complexity that is comparable to that of our Bank. Pursuant to the Bank Act and Finance Agency regulations, the board of directors, after consultation with our Affordable Housing Advisory Council, nominates candidates for the independent director positions. Individuals interested in serving as independent directors may submit an application for consideration by the Executive/Governance Committee, which performs certain functions for our board that are similar to those of a board nominating committee with respect to the nomination of candidates for election as independent directors. The application form is available on our website at www.fhlbi.com, by clicking on "About," "Board of Directors" and "Become a Board Member." Our members may also nominate independent director candidates. The conclusion that an independent director nominee may qualify to serve as a director is based upon the nominee's satisfaction of the eligibility criteria listed above and verified through application and eligibility certification forms prescribed by the Finance Agency. The board then submits the proposed independent director candidate nominations to the Finance Agency for review and comment. Once the Finance Agency has reviewed the candidates proposed for nomination to the board's independent director positions and provides comments, if any, such candidates are slated and a district-wide election is held for those positions.

Under Finance Agency regulations, if the board of directors nominates only one independent director candidate for each open seat, each candidate must receive at least 20% of the votes that are eligible to be cast in order to be elected. If there is more than one candidate for each open independent director seat, then such requirement does not apply.

2023 Member and Independent Director Elections. The Bank Act and Finance Agency regulations set forth the voting rights and processes with respect to the election of member directors and independent directors. The board of directors does not solicit proxies, nor are eligible institutions permitted to solicit or use proxies to cast their votes in an election for directors. For the election of both member directors and independent directors, each eligible institution is entitled to cast one vote for each share of stock that it was required to hold as of the record date (i.e., December 31 of the year prior to the year in which the election is held); however, the number of votes that a member institution may cast for each directorship cannot exceed the average number of shares of stock that were required to be held by all member institutions located in the applicable state on the record date.

The only matter submitted to a vote of our shareholders in 2023 was the fourth quarter election of two Michigan member directors and two district-wide independent directors. No meeting of the members was held with regard to the 2023 election. The 2023 election was conducted in accordance with the Bank Act and Finance Agency regulations.

Board of Directors Vacancies. Vacancies on our board of directors are filled by an election of a majority vote of the remaining directors. The term of any such filled directorship is the unexpired term of office of the vacant directorship. Any individual so elected must satisfy the eligibility requirements applicable to his or her predecessor. Before an election to fill a vacant directorship occurs, we must obtain an executed eligibility certification form from each individual being considered to fill the vacancy, and must verify each individual's eligibility. We must also verify the qualifications of any potential independent director. Before electing an independent director, we must deliver to the Finance Agency for review a copy of the application form of each individual being considered by the board. Promptly following an election to fill a vacancy on the board, we must send a notice to our members and the Finance Agency providing information about the elected director, including his or her name, company affiliation, title, term expiration date and, for member directors, the voting state that the director represents.

Directors Information. Our directors as of the date of the filing of this Form 10-K are listed in the table below:

Name	Age	Director Since	Term Expiration	Independent (elected by District) or Member (elected by State)
Karen F. Gregerson, Chair [1]	63	1/1/2013	12/31/2024	Member (IN)
Robert M. Fisher, Vice Chair [1]	63	1/1/2019	12/31/2026	Member (MI)
Michael E. Bosway	65	1/1/2022	12/31/2025	Independent
Jacqueline L. Buchanan	57	1/1/2024	12/31/2027	Member (MI)
Clifford M. Clarke	60	1/1/2021	12/31/2024	Member (IN)
Kathryn M. Dominguez	63	4/1/2023	12/31/2024	Independent
Anika S. Goss-Foster [2]	52	1/1/2024	12/31/2027	Independent
Charlotte C. Henry	59	1/1/2017	12/31/2024	Independent
Perry G. Hines	61	1/1/2022	12/31/2025	Independent
Margaret M. Lamb	65	1/1/2024	12/31/2027	Member (MI)
Larry W. Myers	65	1/1/2018	12/31/2025	Member (IN)
Todd E. Sears [2]	55	1/1/2021	12/31/2024	Independent
Ryan M. Warner	67	1/1/2023	12/31/2026	Member (IN)
Glenn A. Wilson [2]	40	1/1/2024	12/31/2027	Independent

(1) Our board of directors, with input from the Executive/Governance Committee, elects a Chair and a Vice Chair to two-year terms. On November 18, 2022, our board elected Ms. Gregerson as Chair and Mr. Fisher as Vice Chair for 2023-2024.

(2) Ms. Goss-Foster, Mr. Sears, and Mr. Wilson have been designated public interest directors.

On January 16, 2024, Sherri L. Reagin, an Indiana member director, advised the Bank of her resignation as an officer from the primary member institution with which she was affiliated. Accordingly, Ms. Reagin's resignation resulted in her ineligibility to continue as a member director and the end of her service on the Bank's board of directors. As a result, the Bank has an open seat for an Indiana member director to fill the remainder of Ms. Reagin's term, which expires on December 31, 2025. We expect the board to fill this vacancy with a successor director whose service will commence during the second quarter of 2024.

The following is a summary of the background and business experience of each of our directors. Except as otherwise indicated, for at least the last five years, each director has been engaged in his or her principal occupation as described below.

Karen F. Gregerson joined the board in 2013, and currently serves as Chair. Ms. Gregerson was previously the President and CEO of The Farmers Bank in Frankfort, Indiana, where she served from 2016 until September 2023. She continues to serve as a Director of The Farmers Bank and a Director of The Farmers Bancorp, a bank holding company in Frankfort, Indiana, having been appointed to those positions in 2016. Prior to those appointments, Ms. Gregerson was Senior Vice President and Chief Financial Officer of STAR Financial Bank in Fort Wayne, Indiana, a position she held beginning in 1997. Ms. Gregerson has over 40 years of experience in community banking. She also serves as a member of the board of directors of the Indiana Statewide Certified Development Corporation. Ms. Gregerson holds a bachelor of science degree in accounting from Ball State University and a master of science degree in organizational leadership from the Indiana Institute of Technology. She is a CPA.

Robert M. Fisher joined the board in 2019 and currently serves as Vice Chair. Mr. Fisher was previously the President - CEO of Lake-Osceola State Bank in Baldwin, Michigan, and President and Secretary of Lake Financial Holding Company, its bank holding company, where he served from 2018 until January 2024. He continues to serve as the Vice Chair of that bank's board of directors. Prior to 2018, Mr. Fisher served as President - Chief Operating Officer of Lake-Osceola State Bank since 2005. Mr. Fisher is Chair of the board of Baldwin Family Health Care, a community healthcare program, where he has served as Chair for the past 13 years. Mr. Fisher holds a bachelor of business leadership degree from Baker College.

Michael E. Bosway retired from Stifel Nicolaus & Company in Indianapolis, Indiana, in January 2022, where he had served as Managing Director of Investments for the Central Great Lakes Division commencing in 2017. Previously he was President and CEO of City Securities Corporation from 1999 until its merger with Stifel Nicolaus & Company in 2017. Mr. Bosway serves on the Indy Chamber Board of Directors, the Indianapolis Zoo Board, and the University of Dayton Investment Committee. He previously served on the Indiana Chamber of Commerce Board and Executive Committee. Mr. Bosway holds a bachelor of arts degree in economics from the University of Dayton and a master of business administration degree from The Ohio State University.

Jacqueline L. Buchanan is President and CEO of Genisys Credit Union in Auburn Hills, Michigan, where she has held such position since 2010. Prior to that time, she served as that institution's Executive Vice President and Chief Information Officer since 2008. Ms. Buchanan has served as a director for Lighthouse of Michigan, a non-profit organization with a mission to end homelessness and poverty since 2016, and as a director at Walsh College since 2018. She has also served as a director of PSCU/ Co-op Solutions, a fintech solutions provider for credit unions since 2018. She has also been Chair of CU Solutions Group, a privately held credit union service organization primarily owned by the Michigan Credit Union League. Ms. Buchanan holds an accountancy degree from Walsh College, and a master of information technology degree from Lawrence Technological University. Ms. Buchanan is a licensed Certified Public Accountant (registered status) in the state of Michigan.

Clifford M. Clarke has served as the board Vice Chair of Three Rivers Federal Credit Union in Fort Wayne, Indiana, since 2020, and as a director of the credit union since 2012. Mr. Clarke is the founder, Principal Consultant, and President of C^2 IT Advisors LLC, a strategic information technology consulting firm formed in 2008. He also served as the Chief Information Officer of the Public Technology Institute, a national nonprofit organization advising local municipal executives on technology, research, and best practices, located in Washington, DC, from 2009-2020. He also serves as a Director for Indiana Tech in Fort Wayne, Indiana. Previously, Mr. Clarke served as the Executive Director in the Office of Information Technology of Ivy Tech Community College, Fort Wayne, Indiana from 2010-2019. He has previously served as board Chair of Big Brothers Big Sisters Northeast Indiana and Leadership Fort Wayne. He is on the Fort Wayne Black Chamber of Commerce and previously served as its board president. Mr. Clarke holds a bachelor of science degree in data science and a master of business administration degree, each from Indiana Institute of Technology, where he is pursuing a PhD in global leadership. Mr. Clarke holds several professional certifications including CRISC, CGEIT, CISM, CSSGB, and PMP.

Kathryn M. Dominguez is a professor of public policy and economics at the University of Michigan in Ann Arbor, Michigan, a position she has held since 2006. She also serves as the director of doctoral programs and is the co-faculty director of the Center on Finance, Law and Policy at the Gerald R. Ford School of Public Policy, a position she has held since 2022. Ms. Dominguez has been a research associate at the National Bureau of Economic Research since 1999, and a member of the Advisory Scientific Committee of the European Systemic Risk Board since 2019. She has served on the Panel of Economic Advisors for the Congressional Budget Office since 2017, and on the Economic Advisory Panel for the Federal Reserve Bank of New York since 2019. Ms. Dominguez holds a Bachelor of Arts degree in Economics from Vassar College and a Ph.D. in Economics from Yale University.

Anika S. Goss-Foster is the CEO of Detroit Future City, where she has served in such role as either CEO or Executive Director since 2015. Detroit Future City is a think tank and planning organization for the City of Detroit. Her responsibilities include leading a team that implements land use and community and economic development strategies, with a special emphasis on single family housing. Prior to such role, Ms. Goss-Foster served in various roles with the Local Initiatives Support Corporation (LISC) in Detroit, Michigan. LISC is a national Community Development Financial Institution (CDFI) that provides grants, loans, tax-credit syndication, and other financial support to advance real estate activity in low to moderate income communities in the United States, Puerto Rico, and the U.S. Virgin Islands. Ms. Goss-Foster first served the organization as a Senior Program Manager from 1999-2006, where she focused efforts toward providing technical assistance and support to local community-based housing organizations. She continued to work for LISC as the Vice President of Sustainable Communities LISC offices nationwide to adopt the Building Sustainable Communities Model, and then later transferred to become the Vice-President for the Midwest and Pennsylvania (2008-2015) where she had primary oversight of LISC offices in Chicago, Peoria, Toledo, Milwaukee, Greater Kansas City, Pittsburgh, and Philadelphia. Ms. Goss-Foster currently serves as a board member on the Federal Reserve Bank of Chicago's Detroit Branch, a position she has held since 2022. She was a Council Member on Michigan Governor Whitmer's Growing Michigan Together Council, a state commission focusing on population growth, from June through December of 2023. She has been a director on Greater Detroit Area Foreign Trade Zones since 2019. Ms. Goss-Foster holds a sociology degree and an African American studies degree from Purdue University, and a master of social work degree from the University of Michigan – Ann Arbor.

Charlotte C. Henry served as Chief Information Technology Officer for the UAW Retiree Medical Benefits Trust, in Detroit, Michigan, from December 2014 through January 2022. She is a director of Quaker Chemical Corporation (also known as Quaker Houghton), a chemicals company whose board of directors she joined in 2020. Ms. Henry previously served as a Senior Consultant for Data Consulting Group, an information technology consulting services company in Detroit, Michigan, from 2014 through 2015. Prior to that, she was Vice President - Chief Technology Officer for Auto Club Group of Michigan, an insurance and financial services company in Dearborn, Michigan, from 2008-2014. She was a Director of Global Computing for General Motors Corporation in Detroit, Michigan, from 2004-2007. Ms. Henry also held various information technology leadership positions at Borders Group (2000-2003) and Ford Motor Company (1986-2000). Ms. Henry holds a bachelor of science degree in computer engineering, a master of science degree in computer engineering, and a master of business administration degree in corporate strategy, each from the University of Michigan.

Perry G. Hines is the President and CEO of Wheeler Mission, in Indianapolis, Indiana, a social services organization that provides help to those experiencing homelessness, hunger, and addiction, a position he has held since March 2023. Prior to that time, he served as Chief Development Officer since May 2021. Mr. Hines is also the President and CEO of The Hines Group, a data driven consulting firm operating as an advisor to businesses and non-profit organizations, a position he has held since 2007. Previously, he served as the Director of Advancement for the Covenant Christian Schools of Indianapolis, Inc. from 2017–2021. Prior to such position, he served as the Director of Development for the Shepherd Community Center from 2015–2017. From 2002-2007, he served as the Senior Vice President – Chief Marketing Officer and Communications Officer of Irwin Mortgage Corporation, a division of Irwin Financial Corporation headquartered in Columbus, Indiana. During his tenure, he also oversaw the Irwin Mortgage Corporation Foundation, which provided grant dollars to organizations engaged in providing affordable housing to communities pursuant to the Community Reinvestment Act. Mr. Hines currently serves as an independent director on the Board of Horace Mann Educators Corporation, a financial services company that provides educators and administrators with insurance and retirement solutions, where he has served since 2018. Mr. Hines is also currently a member of the Board of Directors for the Indiana University Lilly Family School of Philanthropy. Mr. Hines previously served on the Goodwill Foundation of Central & Southern Indiana board of directors from 2016-2022. Mr. Hines holds a bachelor of arts degree in journalism and government from Western Kentucky University, a master of business administration degree in marketing from the University of Minnesota Carlson School of Business, and is a certified fund-raising manager from the Indiana University Lilly School of Philanthropy.

Margaret M. Lamb is the Chief Risk Officer and Senior Vice President of People Driven Credit Union in Southfield Michigan, where she has held such position since 2023. Prior to her promotion to Chief Risk Officer, she served as the Chief Financial Officer and Senior Vice President since 2014. Ms. Lamb has over 30 years' experience in financial institution financial management and reporting. She previously served on the Credit Union Executive Society from 2015-2023. She holds a bachelor of science degree in human environment and design, and a master of business administration degree in finance, both from Michigan State University.

Larry W. Myers is the President and CEO of First Savings Bank in Clarksville, Indiana, a position he has held since 2006. In 2008, First Savings Financial Group, Inc., a bank holding company, that is listed on the NASDAQ, was formed and Mr. Myers was appointed as President, CEO and director, positions he has held since that time. Prior to that time, he served as the Chief Operations Officer of First Savings Bank, and has served as a director of that bank since 2005. Mr. Myers has over 40 years' experience in retail banking, commercial lending and wealth management. Mr. Myers has served as Chair of the Indiana Bankers Association, and currently serves as a director on the Board of the American Bankers Association and its FHLBank Committee. He additionally serves as an Advisory Director for the Community Depository Institutions Advisory Council of the Federal Reserve Bank of St. Louis from 2013-2015. Mr. Myers holds a bachelor of science degree in agriculture and a master of business administration degree, both from the University of Kentucky. Mr. Myers holds a Certificate from the Graduate School of Banking of the South program from Louisiana State University in Baton Rouge, Louisiana. The board of directors has determined that Mr. Myers is an Audit Committee Financial Expert due primarily to his extensive experience as director, CEO, and chief operations officer of a commercial bank.

Todd E. Sears is Vice President of Development at Cohen Esrey, headquartered in Merriam, Kansas, and has held such position since April 2023. He previously served as the Chief Investment Officer and Chief Financial Officer of Valeo Financial Advisors, a registered investment advisor based in Indiana, a position he has held since 2022. He was previously the Executive Vice President of Research, Policy and Strategy at Kittle Property Group, Inc. (formerly Herman & Kittle Properties, Inc.), in Indianapolis, Indiana, a national multifamily housing property developer, having served in that position since 2021. Prior to that appointment, he served as Executive Vice President from 2018-2021, after serving as Executive Vice President - Portfolio Management and Analysis beginning in 2014. He joined Kittle Property Group Inc. in 2005. Since 2017, Mr. Sears has served as an adjunct professor of real estate finance at Butler University. He previously served on our Affordable Housing Advisory Council from 2012-2018. He is the founder of Pyxso, LLC, a consulting firm through which he has provided advisory services to not-for-profit companies since 2011. Mr. Sears holds a bachelor of science degree in finance from Indiana University, Bloomington, Indiana, and a master of arts degree in economics from Indiana University, Indianapolis, Indiana. Mr. Sears is a CFA® charterholder and holds a Chartered Alternative Investment Analyst designation.

Ryan M. Warner is Chairman of Bippus State Bank in Huntington, Indiana, and has held that position since 2019. He also serves on the Board of the Bippus State Corporation, its bank holding company. Previously, Mr. Warner served as President - CEO and a director of that bank since 1987. He has been employed by that bank since 1977. Mr. Warner previously served as one of our directors from 2017-2020. Mr. Warner previously served as a member of the Huntington County Economic Development board of directors from 2012-2021. Mr. Warner holds an associate degree in accounting from International Business College, and a Certificate of Banking from the Graduate School of Banking program at the University of Wisconsin - Madison. The board of directors has determined that Mr. Warner is an Audit Committee Financial Expert due primarily to his extensive experience as a director, Chairman and CEO, President, and other senior management capacities of a commercial bank.

Glenn A. Wilson is the President and CEO of Communities First, Inc., where he has served in such role since 2010. Communities First, Inc. is a statewide nonprofit community development corporation headquartered in Flint, Michigan with offices in Flint and Detroit, providing affordable housing, economic development, financial education, financial protection services and other programs to low- and moderate-income families as well as small businesses. Mr. Wilson's responsibilities include overseeing the entirety of the organization, including developing and managing all aspects of new construction for mixed use and commercial properties. He currently serves as a director for the Michigan Housing Council, a position he has held since 2016. He served as a member of the Federal Home Loan Bank's Affordable Housing Advisory Council from 2017-2023, where he served on multiple subcommittees and provided consult regarding the Bank's low- and moderate-income housing programs and affordable housing needs in Indiana and Michigan. Mr. Wilson holds a business administration degree from Northwood University and a master of science in administration degree from Central Michigan University.

Committee Assignments. Each of our directors serves on one or more committees of our board. Committee assignments are made annually, based on board consensus, with input from the President - CEO. Committee assignments take into consideration several factors, including the committees' responsibilities and needs, directors' preferences and expertise, the benefits of rotations in committee memberships, and balancing the committees' responsibilities among all directors.

The following table presents the committees on which each director serves as of the filing date of this Form 10-K, as well as whether the director is the Chair (C), Vice Chair (VC), Interim Chair (IC), member (x), alternate (A), or Ex-Officio member (EO).

Name	Affordable Housing	Audit	Executive/ Governance	Finance/ Budget	Human Resources and Compensation [(1)]	Risk Oversight	Security and Technology [(2)]
Karen F. Gregerson, Chair	EO	EO	C	EO	EO	EO	EO
Robert M. Fisher, Vice Chair			VC	X	X	IC	
Michael E. Bosway			X	C			X
Jacqueline L. Buchanan		VC		X			X
Clifford M. Clarke	X		X				C
Kathryn M. Dominguez				X	X	VC	
Anika S. Goss-Foster	X				X	X	
Charlotte C. Henry		X				X	VC
Perry G. Hines	X		A	X	VC		
Margaret M. Lamb				VC	X	X	
Larry W. Myers		C	X			X	
Todd E. Sears	C		X				X
Ryan M. Warner		X	X		C		
Glenn A. Wilson	VC	X					X

(1) The Human Resources Committee was renamed the Human Resources and Compensation Committee effective January 1, 2024.
(2) The Technology Committee was renamed the Security and Technology Committee effective January 1, 2024.

It has been the practice of the board of directors to not appoint any director as Chair of more than one committee.

Audit Committee. Our board of directors has a standing Audit Committee that was comprised of the following directors for 2023:

Robert D. Long, Chair, independent director
Sherri L. Reagin, Vice Chair
Charlotte C. Henry, independent director
Kenneth Kelly
Larry W. Myers
Ryan M. Warner
Karen F. Gregerson, Ex-Officio Voting Member

Audit Committee Report. Our Audit Committee operates under a written charter adopted by the board of directors. The Audit Committee charter is available on our website at www.fhlbi.com by selecting "About" and then selecting "Corporate Governance." In accordance with its charter, the Audit Committee assists the board in fulfilling its fiduciary responsibilities and overseeing the internal and external audit functions. The Audit Committee is responsible for evaluating the Bank's compliance with laws, regulations, policies and procedures (including the Code of Conduct), and for determining that the Bank has adequate administrative, operating and internal controls. In addition, the Audit Committee is responsible for providing reasonable assurance regarding the integrity of financial and other data used by the board, the Finance Agency, our members and the public. Furthermore, the Audit Committee oversees the programs, policies, and systems of the Bank designed to ensure the integrity and reliability of Bank operations and technology. To fulfill these responsibilities, the Audit Committee may, in accordance with its charter, conduct or authorize investigations into any matters within the Committee's scope of responsibilities. The Audit Committee may also retain independent counsel, accountants, or others to assist in satisfying its responsibilities.

The Audit Committee annually reviews its charter and practices and has determined that its charter and practices are consistent with all applicable laws, regulations and policies. In addition, during 2023, the Audit Committee met 13 times and among other duties:

- reviewed the scope of and overall plans for the external and internal audit programs;
- reviewed and recommended board approval of the Bank's Code of Conduct, which includes our policy regarding the hiring of former employees of our independent registered public accounting firm, PricewaterhouseCoopers ("PwC");
- reviewed and approved our policy for the pre-approval of audit and permitted non-audit services by the independent registered public accounting firm ("independent auditor");
- received reports pursuant to our policy for the submission and confidential treatment of communications from employees and others about accounting, internal controls and auditing matters;
- reviewed the adequacy of our internal controls, including for purposes of evaluating the fair presentation of our financial statements in connection with certifications made by our principal executive officer, principal financial officer and principal accounting officer;
- discussed with management and PwC significant matters, including Critical Audit Matters, arising during the audit and other areas of significant judgment or estimation in preparing the financial statements;
- reviewed and challenged management and PwC, as necessary, on how they have established materiality thresholds for establishing the controls over financial reporting and their audit process; and
- discussed with management the use and appropriateness of any non-GAAP measures in the financial statements.

The Sarbanes-Oxley Act of 2002 requires the Audit Committee to establish and maintain procedures for the confidential submission of employee concerns regarding questionable accounting, internal controls or auditing matters. The Audit Committee has established procedures for the receipt, retention and treatment, on a confidential basis, of any related concerns we receive. The Audit Committee encourages employees and third-party individuals and organizations to report concerns about accounting, controls, auditing matters or anything else that appears to involve financial or other wrongdoing pertaining to the Bank.

The Bank is one of 11 regional FHLBanks across the United States which, along with the Office of Finance, compose the FHLBank System. Each FHLBank operates as a separate entity with its own management, employees, board of directors, and shareholders and each is regulated by the Finance Agency. The Office of Finance has responsibility for the issuance of consolidated obligations on behalf of the FHLBanks, and for publishing combined financial reports of the FHLBanks. Accordingly, the FHLBank System has determined that it is optimal to have the same independent auditor to coordinate and perform the separate audits of the financial statements of each FHLBank and the FHLBanks' combined financial reports. The FHLBanks and the Office of Finance cooperate in selecting, setting the compensation of, and evaluating the performance of the independent auditor, but the responsibility for the appointment of and oversight of the independent auditor remains solely with the Audit Committee of each FHLBank and the Office of Finance.

PwC has been the independent auditor for the FHLBank System and the Bank since 1990. In connection with the annual appointment of the Bank's independent auditor, the Audit Committee not only engages in discussions with the audit committees of the other FHLBanks and the Office of Finance, but it considers, among other factors:

- an analysis of the risks and benefits of retaining the same firm as independent auditor versus engaging a different firm, including consideration of:
    - PwC engagement audit partner, engagement quality review partner and audit team rotation;
    - PwC's tenure as the Bank's and the FHLBank System's independent auditor;
    - benefits associated with engaging a different firm as independent auditor; and
    - potential disruption and risks associated with changing the Bank's independent auditor;
- PwC's familiarity with our operations and businesses, accounting policies and practices and internal control over financial reporting;
- PwC's historical and recent performance of our audit, including feedback from Bank management as to PwC's service and quality;
- an analysis of PwC's known legal risks and significant proceedings;
- both engagement and external data relating to audit quality and performance, including recent Public Company Accounting Oversight Board audit quality inspection reports on PwC and its peer firms as well as metrics indicative of audit quality;
- the appropriateness of PwC's fees, on both an absolute basis and as compared to fees charged to other banks both within and beyond the FHLBank System and trends therein; and
- the diversity of PwC's ownership and staff assigned to the engagement.

The Audit Committee reviews and approves the compensation paid to PwC for audit, audit-related and other services. Audit fees represent fees for professional services rendered in connection with the audit of our annual financial statements and internal control over financial reporting and reviews of our quarterly financial statements, regulatory filings, and other SEC matters. The Audit Committee has determined that PwC did not provide any non-audit services that would impair its independence. To the Audit Committee's knowledge, there are no other matters which cause the Audit Committee to believe PwC is not independent.

In accordance with SEC rules, audit partners are subject to rotation requirements to limit the number of consecutive years an individual partner may provide service to our Bank. For engagement audit and quality review partners, the maximum number of consecutive years of service in that capacity is five years. The process for selection of our lead audit partner pursuant to this rotation policy involves a meeting between the Chair of the Audit Committee and the candidate(s) for the role, as well as discussion by the full Audit Committee and with management. The Bank's current lead audit partner has served since 2021.

Based on its evaluation and review, the Audit Committee appointed PwC as our independent auditor for the year ended December 31, 2023.

Management has the primary responsibility for the integrity and reliability of our financial statements, accounting and financial reporting principles, and internal controls and procedures designed to assure compliance with accounting standards and applicable laws and regulations. An independent auditor is responsible for performing an independent audit of our financial statements and of the effectiveness of internal control over financial reporting in accordance with auditing standards promulgated by the Public Company Accounting Oversight Board and standards applicable to financial audits in accordance with *Government Auditing Standards*, issued by the Comptroller General of the United States. Our internal auditors are responsible for preparing an annual audit plan and conducting internal audits under the direction of our Chief Internal Audit Officer, who reports to the Audit Committee.

The Audit Committee's responsibility is to monitor and oversee these processes. The Audit Committee has certain other responsibilities with respect to the internal audit function, including facilitation of independent, direct communications between the board and our internal auditors. The Audit Committee also reviews the scope of internal audit services required, internal audit findings, and management responses. In addition, the Audit Committee is responsible for the selection, compensation, performance evaluation and independence of the Chief Internal Audit Officer, who may be removed only with the Audit Committee's approval. The Audit Committee also approves the incentive compensation plans and awards for internal audit employees; the charter for the internal audit department; and the staffing, budget, and risk-based internal audit plan.

Prior to their issuance, the Audit Committee reviews and discusses the quarterly and annual earnings releases, financial statements (including the presentation of any non-GAAP financial information) and additional disclosures under "Management's Discussion and Analysis of Financial Condition and Results of Operations" with management, our internal auditors and PwC. The Audit Committee also oversees our internal auditors' review of our policies and practices with respect to financial risk assessment, and our processes and practices with respect to enterprise risk assessment and management (although the board's Risk Oversight Committee has primary responsibility for the review of our risk assessment and risk management matters). The Audit Committee discussed with PwC matters required to be discussed by Auditing Standard No. 1301 Communications with Audit Committee, as amended, and Rule 2-07 (Communication with Audit Committees) of Regulation S-X; received the disclosures and letter from PwC required by applicable requirements of the Public Company Accounting Oversight Board concerning independence, and has discussed PwC's independence with PwC. The Audit Committee met with PwC and with our internal auditors, in each case with and without other members of management present, to discuss the results of their respective audits; their views regarding the appropriateness of management's estimates, judgments, selection of accounting policies, and systems of internal controls; and the overall quality and integrity of our financial reporting. Management represented to the Audit Committee that our financial statements were prepared in accordance with accounting principles generally accepted in the United States of America.

Based on its discussions with our management, our internal auditors and PwC, as well as its review of the representations of management and PwC's report, the Audit Committee recommended to the board, and the board has approved, the inclusion of the audited financial statements in our Annual Report on Form 10-K for the year ended December 31, 2023, for filing with the SEC.

Audit Committee Financial Experts. On March 23, 2023, our board of directors determined that Audit Committee Chair Robert D. Long, Audit Committee Vice Chair Sherri L. Reagin, and Audit Committee members Larry W. Myers, and Ryan M. Warner were Audit Committee Financial Experts under SEC rules. For information concerning our incumbent directors' qualifications to be so designated, please refer to their respective biographical summaries above in this Item 10.

Executive Officers

Our Executive Officers, as determined under SEC rules, are listed in the table below. Each officer serves a term of office of one calendar year or until the election and qualification of his or her successor, provided, however, that pursuant to the Bank Act, our board of directors may dismiss any officer at any time. Except as indicated, each officer has been employed in the principal occupation listed below for at least five years.

Name	Age	Position
Cindy L. Konich (1)	67	President - Chief Executive Officer ("CEO")
Brendan W. McGrath (2)	46	Executive Vice President - Chief Risk Officer ("CRO")
Deron J. Streitenberger (3)	56	Executive Vice President - Chief Business Operations Officer ("CBOO")
Gregory L. Teare (4)	70	Executive Vice President - Chief Financial Officer ("CFO")
Chad A. Brandt (5)	59	Senior Vice President - Treasurer
Shaun H. Clifford (6)	63	Senior Vice President - General Counsel and Chief Compliance Officer (Ethics Officer)
Kristina L. Cunningham (7)	48	Senior Vice President - Senior Director of Compliance & Operational Risk Analysis
Christopher Dawson (8)	47	Senior Vice President - Chief Information Officer ("CIO")
Jonathan W. Griffin (9)	53	Senior Vice President - Chief Business Development Officer
Kania D. Lottie (10)	42	Senior Vice President - Chief Human Resources and Diversity, Equity, & Inclusion Officer (Ethics Officer)
Gregory J. McKee (11)	50	Senior Vice President - Chief Internal Audit Officer
Pankaj Seth (12)	61	Senior Vice President - Chief Credit Risk Officer
K. Lowell Short, Jr. (13)	67	Senior Vice President - Chief Accounting Officer
Mary Beth Wott (14)	59	Senior Vice President - Community Investment & Strategic Planning Officer

(1) Ms. Konich was appointed by our board of directors to serve as President - CEO in July 2013. As an FHLBank President, she serves on the Board of Directors of the FHLBanks Office of Finance, and is a member of its Governance Committee. Ms. Konich holds an MBA and is a CPA.

(2) Mr. McGrath was promoted to Executive Vice President - Chief Risk Officer effective January 2021. Previously, he was appointed Senior Vice President - Chief Risk Officer effective May 2020, after having been appointed Senior Vice President - Chief Analytics Officer effective January 2019, and First Vice President - Director of Credit Risk Analysis effective January 2017. Mr. McGrath holds a masters of science in accounting, is a CPA and a CFA® charterholder.

(3) Mr. Streitenberger was promoted to Executive Vice President - CBOO effective January 2019, after having been appointed Senior Vice President - CBOO effective January 2016. Mr. Streitenberger holds an MBA.

(4) Mr. Teare was promoted to Executive Vice President - CFO effective January 2017, after having been appointed Senior Vice President - CFO in February 2015. Mr. Teare holds an MBA.

(5) Mr. Brandt was appointed Senior Vice President - Treasurer effective January 2016. Mr. Brandt holds an MBA.

(6) Ms. Clifford was appointed Senior Vice President - General Counsel effective March 2020, and was appointed Senior Vice President - General Counsel & Chief Compliance Officer effective May 2020. Ms. Clifford also serves as one of the Bank's Ethics Officers. Previously, Ms. Clifford was a Partner at the law firm Faegre Drinker Biddle & Reath LLP from January 2003 to February 2020. Ms. Clifford holds a JD and is licensed to practice law in the State of Indiana.

(7) Ms. Cunningham was promoted to Senior Vice President - Senior Director of Compliance & Operational Risk Analysis effective May 2020. Previously, she was appointed First Vice President - Senior Director of Compliance + Operational Risk Analysis effective November 2018, after having been appointed First Vice President - Director of Operational Risk Analysis effective January 2018. Ms. Cunningham holds an MBA and a CRMA certification, and is a CPA.

(8) Mr. Dawson was promoted to Senior Vice President - Chief Information Officer effective January 2019, after having been appointed First Vice President - Chief Technology Officer in November 2015. Mr. Dawson holds an MBA.

(9) Mr. Griffin was appointed Senior Vice President - Chief Business Development Officer in June 2018, after serving as Senior Vice President - Chief Marketing Officer from 2017-2018. Mr. Griffin holds an MBA and is a CFA® charterholder.

(10) Ms. Lottie was promoted to Senior Vice President - Chief Human Resources and Diversity & Inclusion Officer in July 2019, which position was redesignated as Senior Vice President - Chief Human Resources and Diversity, Equity, & Inclusion Officer in September 2020. Previously, she had been appointed First Vice President - Director of Human Resources and Diversity & Inclusion in November 2018, after having been appointed First Vice President - Director of Human Resources effective January 2018. Ms. Lottie also serves as one of the Bank's Ethics Officers. She holds an MBA and a JD and is licensed to practice law in the State of Indiana. She also holds SPHR and SHRM-SCP certifications.

(11) Mr. McKee was promoted to Senior Vice President - Chief Internal Audit Officer effective January 2015. Mr. McKee holds an MBA and is a CPA.

(12) Mr. Seth was appointed Senior Vice President - Chief Credit Risk Officer in December 2023. Previously, Mr. Seth was EVP - Chief Consumer Credit Officer & Enterprise Risk Head for Bank of the West from January 2021 to December 2023 and SVP - Chief Consumer Credit Officer at Bank of the West from June 2015 to January 2021. Mr. Seth holds an MBA and is a certified Chartered Accountant.

(13) Mr. Short was appointed Senior Vice President - Chief Accounting Officer in August 2009. Mr. Short holds an MBA and is a CPA.

(14) Ms. Wott was appointed to Senior Vice President - Community Investment & Strategic Planning Officer on May 22, 2023, after serving as Senior Vice President - Community Investment & Underwriting/Collateral Operations Officer since August 2021. Previously Ms. Wott served as Senior Vice President - Community Investment Officer effective July 2019, after having been appointed First Vice President - Community Investment Officer in July 2013. Ms. Wott holds an MBA.

Code of Ethics and Codes of Conduct

We have a Code of Ethics for Senior Financial Officers ("Code of Ethics") that applies to our principal executive officer, our principal financial officer, and our principal accounting officer ("Senior Financial Officers"). The Code of Ethics sets forth the obligations of the Senior Financial Officers related to honest and ethical conduct; full, fair, accurate, timely, and understandable disclosures; compliance with applicable laws, rules and regulations; prompt internal reporting of Code of Ethics violations; and accountability for adherence to the Code of Ethics. The Bank intends to post information regarding any amendments to, or waivers from, its Code of Ethics on its website. Additionally, we have a Code of Conduct and Conflict of Interest Policy for Affordable Housing Advisory Council Members, a Code of Conduct and Conflict of Interest Policy for Directors and a Code of Conduct and Conflict of Interest Policy for Employees and Contractors (collectively, the "Codes of Conduct").

The Codes of Conduct and the Code of Ethics are available on our website at www.fhlbi.com, by selecting "About" and then "Corporate Governance." Interested persons may also request a copy of the Codes of Conduct and the Code of Ethics by contacting us, Attention: General Counsel, Federal Home Loan Bank of Indianapolis, 8250 Woodfield Crossing Boulevard, Indianapolis, IN 46240.

Section 16(a) Beneficial Ownership Reporting Compliance

Not Applicable.

ITEM 11. EXECUTIVE COMPENSATION

We use acronyms and terms throughout this Item that are defined herein or in the *Defined Terms*.

Compensation Committee Interlocks and Insider Participation

The Human Resources and Compensation Committee ("HR Committee") is a standing committee that serves as our board of directors' compensation committee. It is comprised solely of directors. During the year ended December 31, 2023:

- directors Narayanan, Warner, Clarke, Fisher, and Hines were members of the HR Committee, with director Gregerson serving in ex officio capacity;
- none of those directors was, or has at any time been, a Bank officer or employee;
- none of those directors had any relationship that would be disclosable under Item 404 of SEC Regulation S-K; and
- none of our executive officers has served on any board of directors or compensation committees of any entities whose executive officers served on the HR Committee.

Compensation Committee Report

On March 12, 2024, the HR Committee reviewed and discussed with Bank management the "Compensation Discussion and Analysis" that follows and, based on such review and discussions, recommended to our board of directors that the Compensation Discussion and Analysis be included in this report.

As of the filing date of this Form 10-K, the members of the HR Committee are:

- Ryan M. Warner, Chair
- Perry G. Hines, Vice Chair
- Kathryn M. Dominguez
- Robert M. Fisher
- Anika S. Goss-Foster
- Margaret M. Lamb and
- Karen F. Gregerson, ex officio.

Compensation Discussion and Analysis

Overview. To provide perspective on our compensation programs and practices for our NEOs, we have included certain information in this Compensation Discussion and Analysis relating to Executive Officers (as defined in SEC rules) and employees other than the NEOs. The NEOs consist of (i) our principal executive officer, who is our CEO, (ii) our principal financial officer, who is our CFO, and (iii) our other three most highly compensated executive officers determined by the sum of salary, non-equity incentive compensation, and all other compensation (but excluding change in pension value and non-qualified deferred compensation earnings) for the year ended December 31, 2023. Our NEOs are:

- Cindy L. Konich, CEO
- Gregory L. Teare, CFO
- Brendan W. McGrath, CRO
- Deron J. Streitenberger, CBOO
- Christopher S. Dawson, CIO

Our executive compensation program is overseen by the Executive/Governance Committee (with respect to the CEO's performance and compensation) and the HR Committee (with respect to the other NEOs' compensation), and ultimately by the entire board of directors. The HR Committee meets at scheduled times throughout the year (six times in 2023) and reports its recommendations to the board. The HR Committee has the authority to obtain advice and assistance from outside legal counsel, compensation consultants, and other advisors as the HR Committee deems necessary, with all fees and expenses paid by our Bank.

The Executive/Governance Committee assists the board in the governance of our Bank, including nominations of the Chair and Vice Chair of the board and its committee structures and assignments, and in overseeing the affairs of our Bank during intervals between regularly scheduled meetings of the board, as provided in our bylaws. The Executive/Governance Committee meets as needed throughout the year (six times in 2023) and reports its recommendations to the board.

Finance Agency Oversight of Executive Compensation.

Bank Act and Finance Agency Executive Compensation Rule. The Finance Agency provides oversight of FHLBank compensation, which influences compensation decisions impacting the NEOs. Aspects of this oversight include:

- the Director of the Finance Agency's authority to prevent the FHLBanks from paying compensation to executive officers that is not "reasonable and comparable" to compensation paid at institutions of similar size and function for similar duties and responsibilities;
- a Finance Agency rule on executive compensation which, among other provisions, requires us to provide information to the Finance Agency for review and non-objection concerning all compensation actions impacting NEOs; and
- a Finance Agency rule on golden parachute payments, under which the Finance Agency may limit or prohibit certain payments to NEOs, particularly if such payments may be made in connection with the termination of an NEO.

The Finance Agency has also issued an Advisory Bulletin and related guidance setting forth certain principles on executive compensation. These principles provide that executive compensation should be: comparable to similar positions at comparable institutions; consistent with sound risk management; and tied to longer-term performance and outcome indicators with a percentage to be deferred accordingly. These principles have been incorporated into the development, implementation, and review of compensation policies and practices for the NEOs.

Compensation Philosophy and Objectives. In 2023, our board of directors adopted a resolution updating our statement of compensation philosophy. Pursuant to the resolution, our compensation philosophy is to provide a market-competitive total rewards package that will enable us at reasonable cost to effectively recruit, promote, retain and motivate highly qualified employees, management and leadership talent for the benefit of our Bank, its members, and other stakeholders in alignment with the Bank's diversity, equity, and inclusion objectives. We desire to be competitive and forward thinking while maintaining a somewhat risk-averse culture. Thus, our compensation program encourages operational excellence, superior member service, responsible growth and prudent risk-taking while delivering a competitive pay package.

Specifically, our compensation program is designed to reward:

- attainment of performance goals;
- implementation of short- and long-term business strategies;
- accomplishment of our public policy mission;
- effective and appropriate management of financial, operational, reputational, regulatory, and human resources risks;
- growth and enhancement of senior management leadership and functional competencies; and
- accomplishment of goals to maintain an efficient, cooperative system of FHLBanks.

The board of directors regularly reviews these goals and the compensation alternatives available and may make changes in the program from time to time to better achieve these goals or to comply with Finance Agency directives. As a cooperative, we are not able to offer equity-based compensation, and only member institutions (or their legal successors) may own our stock. Without equity incentives to attract, reward and retain NEOs and senior management, we provide alternative compensation and benefits such as cash incentive opportunities, pension (with respect to Ms. Konich, Mr. Teare, and Mr. McGrath) or additional non-elective contributions (with respect to Mr. Streitenberger and Mr. Dawson) and other retirement benefits (to all NEOs). This approach generally will lead to a mix of compensation for NEOs that emphasizes base salary, provides meaningful incentive opportunities, and creates a competitive total compensation opportunity relative to the market.

Role of the Executive/Governance and HR Committees in Setting Executive Compensation. The Executive/Governance and HR Committees intend that our executive compensation program be aligned with our Bank-wide short-term and long-term business objectives and focus executives' efforts on fulfilling these objectives. The Executive/Governance Committee reviews the CEO's performance and researches and recommends the CEO's salary to the board of directors. The CEO determines the salaries of the other NEOs, generally after consulting with the HR Committee, as discussed below. The HR Committee recommends, for approval by the board, the percentage of salary increases that will apply to merit and promotional or internal pay equity adjustments for each year's budget. The retirement benefit plans that will be offered, and any material changes to those plans from time to time, are approved by the board after review and recommendation by the HR Committee. The HR Committee also recommends the goals, payouts and qualifications for both the annual incentive awards and the deferred incentive awards for the board's review and approval.

Our Executive/Governance and HR Committees operate under written charters adopted by the board of directors, most recently reviewed by the board as of January 19, 2024. Those charters are available on our website www.fhlbi.com by selecting "About" and then selecting "Corporate Governance."

Role of Compensation Consultants in Setting Executive Compensation. For each of the last 13 years, McLagan Partners, Inc. ("McLagan"), an Aon plc company, has been engaged to work with the HR Committee to evaluate the Bank's compensation for certain positions, including the NEOs' positions, as we seek to maintain compensation that is reasonable and competitive.

The evaluation uses the competitor groups identified by McLagan. The competitor groups are comprised of selected firms that participated in McLagan's Financial Industry Salary Survey. The firms included in the competitor groups can change year-to-year, based on changes in the composition of the McLagan survey participants, changes in financial metrics of firms that participated in the survey for that year, and McLagan's analysis.

As a guideline, McLagan considers compensation for a role within 15 percent of the correlating positions at the competitor groups to be within the competitive market range. We consider this general range along with our financial performance, stability, prudent risk-taking and conservative operating philosophies, internal pay equity, and our compensation philosophy in setting compensation.

For 2023, McLagan's competitor groups consisted of two peer groups, consistent with guidance provided by the Finance Agency. The first peer group is comprised of the 10 other FHLBanks and the Office of Finance. The positions used from the other FHLBanks are comparable to the positions at our Bank (*e.g.*, CEO to CEO).

The second peer group consists of banks with assets of $10 billion to $20 billion. There are 50 banks in the second peer group. The positions used from this peer group are comparable to the positions at our Bank (*e.g.*, CEO to CEO).

Apple Financial Holdings	First Busey Corporation	OceanFirst Bank
Axos Financial, Inc.	First Financial Bancorp - OH	PlainsCapital Bank
BancFirst Corporation	First Financial Bankshares, Inc.	Provident Financial Services
Bank of North Dakota	First Foundation Inc.	Renasant Corporation
Banner Bank	First Merchants Bank	Sandy Spring Bank
Berkshire Bank	First United Bank - OK	Seacoast Banking Corporation of Florida
Bremer Financial Corporation	Hilltop Holdings Inc.	ServisFirst Bancshares, Inc.
Central Bancompany, Inc	Hope Bancorp, Inc.	State Bank & Trust
Columbia Bank - NJ	Independent Bank Corp.	Stellar Bancorp, Inc.
Community Bank System, Inc.	Independent Bank - TX	TowneBank
CVB Financial Corp.	International Bancshares Corporation	TriState Capital Bank
Dime Community Bancshares, Inc.	Lakeland Bancorp, Inc.	Trustmark Corporation
Eagle Bancorp Inc. - MD	Mechanics Bank	Veritex Holdings, Inc.
Enterprise Financial Services Corp.	Merchants Bank of Indiana	Washington Trust Bank
FB Financial Corporation	Mutual of Omaha	WesBanco, Inc.
First BanCorp NC	NBT Bancorp Inc.	WSFS Financial Corporation
First Bancorp - PR	Northwest Bank - PA	

The positions selected by McLagan from the competitor groups collectively capture the functional and executive responsibilities of our NEO positions, represent comparable market opportunities and represent realistic employment opportunities. We establish threshold, target and maximum base and anticipated incentive pay levels based on this analysis, while actual pay levels are based on our financial performance, stability, prudent risk-taking and conservative operating philosophies, internal pay equity, and our compensation philosophy, as discussed above.

Role of the Named Executive Officers in the Compensation Process. The NEOs may assist the HR Committee and the board of directors by providing data and background information to any compensation consultants engaged by management, the board or the HR Committee. The Human Resources department assists the HR Committee and compensation consultants by gathering research on the Bank's hiring and turnover statistics, compensation trends, peer groups, cost of living, and other market data requested by the CEO, the HR Committee, the Finance/Budget Committee, the Audit Committee, the Executive/Governance Committee, or the board. Senior management (including the NEOs) prepares the strategic plan financial forecasts, which are then considered by the Finance/Budget Committee and by the board when establishing the goals and anticipated payout terms for the incentive compensation plan. The CRO oversees the Enterprise Risk Management department's review, from a risk perspective, of the incentive compensation plan's risk-related performance goals and target achievement levels.

Compensation Risk. The HR Committee and the Executive/Governance Committee review our policies and practices of compensating our employees, including non-executive officers, and have determined that none of these policies or practices result in any risk that is reasonably likely to have a material adverse effect on the Bank. Further, based on such reviews, the HR Committee and the Executive/Governance Committee believe that our plans and programs contain features that reduce the likelihood of employees taking excessive risks relating to the compensation-related aspects of their duties. In addition, the material plans and programs operate within a strong governance, review and regulatory structure that serves and supports risk mitigation.

Elements of Compensation Used to Achieve Compensation Philosophy and Objectives. The total compensation mix for NEOs in 2023 consisted of:

(1) base salaries;
(2) annual and deferred incentive opportunities;
(3) retirement benefits;
(4) perquisites and other benefits; and
(5) potential payments upon termination or change in control.

The board of directors has structured the compensation programs to comply with Internal Revenue Code Section 409A. If an executive is entitled to nonqualified deferred compensation benefits that are subject to Internal Revenue Code Section 409A, and such benefits do not comply with Internal Revenue Code Section 409A, then the benefits are taxable in the first year they are not subject to a substantial risk of forfeiture. In such case, the executive is subject to payment of regular federal income tax, interest and an additional federal income tax of 20% of the benefit includable in income. The Key Employee Severance Agreement ("KESA") between our Bank and our CEO contains provisions that "gross-up" certain benefits paid thereunder in the event she should become liable for an excise tax on such benefits. Other elements of our NEOs' compensation may be adjusted to reflect the tax effects of such compensation.

Base Salaries. Unless otherwise described, the term "base salary" as used in this Item 11 refers to an individual's annual salary, including any adjustments, before considering incentive compensation, deferred compensation, perquisites, taxes, or any other adjustments that may be elected or required. We recruit and desire to retain senior management from national markets. Consequently, the cost of living in Indiana is not a direct factor in determining base salary. Merit increases to base salaries are used, in part, to keep our NEO salary levels competitive with those in the Competitor Groups.

The CEO's base salary is established annually by the board after review and recommendation by the Executive/Governance Committee. Our board has concluded that the level of scrutiny to which the base salary determination for the CEO is subjected is appropriate in light of the nature of the position and the extent to which she is responsible for the overall performance of our Bank. In setting the CEO's base salary, the Executive/Governance Committee and the board have discretion to consider a wide range of factors, including the overall performance of our Bank, the CEO's individual performance, her tenure, and the amount of her base salary relative to the base salaries of executives in similar positions in companies in our Competitor Groups. Although a policy or a specific formula has not been developed for such purpose, the Executive/Governance Committee and the board also consider the amount and relative percentage of the CEO's total compensation that is derived from her base salary. In light of the variety of factors that are considered, the Executive/Governance Committee and the board have not attempted to rank or otherwise assign relative weights to the factors they consider. Rather, the Executive/Governance Committee and the board consider all the factors as a whole, including data and recommendations from McLagan.

After an advisory consultation with the HR Committee, the base salaries for our other NEOs are set or approved annually by the CEO, who has discretion to consider a wide range of factors including competitive benchmark data from McLagan, each NEO's qualifications, responsibilities, assessed performance contribution, tenure, position held, amount of base salary relative to similarly-positioned executives in our competitor groups and our overall salary budget. Although a policy or a specific formula has not been developed for such purpose, the CEO also considers the amounts and relative percentages of the NEOs' total compensation that are derived from their base salaries, including data and recommendations from McLagan.

The NEOs’ base salaries for 2023 were effective January 1, 2023 and are presented in the Summary Compensation Table.

Annual and Deferred Incentive Opportunities. Generally, as an executive's level of responsibility increases, a greater percentage of total compensation is variable and based on the Bank's overall performance. The board adopts incentive plans to grant this variable element of executive compensation. Our incentive plans include a measurement framework that rewards achievement of specific goals consistent with our mission. As discussed below, our incentive plan is performance-based and represents a reasonable risk-return balance for our cooperative members both as users of our products and as shareholders, and is appropriate to our status and risk appetite as a housing GSE.

The current incentive compensation plan, which was originally adopted by the board effective January 1, 2012 and has been amended and restated from time to time ("Incentive Plan"), provides incentive compensation opportunities for all employees. The Incentive Plan provides cash award opportunities based on achievement of performance goals. The purpose of the Incentive Plan is to attract, retain and motivate employees, including the NEOs, and to focus their efforts on a reasonable level of profitability while maintaining safety and soundness. Employees in the Internal Audit department are excluded from the Incentive Plan but are eligible to participate in a separate incentive compensation plan established by the Audit Committee. With certain exceptions, any eligible employee hired before October 1 of a calendar year becomes a participant in the Incentive Plan for that calendar year. A "Level I Participant" is the Bank's CEO, an EVP, or a SVP, while a "Level II Participant" is any other participating employee. All NEOs identified as of each December 31 are included among the eligible Level I Participants and must execute an agreement with us containing certain non-solicitation and non-disclosure provisions.

Performance goals and the relative weight to be accorded to each goal are established annually by the HR Committee and approved by the board of directors for each calendar-year period ("Performance Period") and three-calendar-year period ("Deferral Performance Period"). The board also approves the "Threshold," "Target" and "Maximum" achievement levels for each performance goal to determine how much of an award may be earned. The achievement of performance goals determines the value of awards, which for Level I Participants (including the NEOs) may be Annual Awards (relating to achievement of performance goals over a Performance Period) and Deferred Awards (relating to achievement of performance goals over a Deferral Performance Period), and for Level II Participants includes Annual Awards only. The board may adjust the performance goals to ensure the purposes of the Incentive Plan are served, but made no such adjustments during 2021, 2022 or 2023. The board establishes maximum awards under the plan before the beginning of each Performance Period. Each award equals a percentage of the Participant's annual compensation, which is generally defined as the Participant's base salary excluding any bonus, incentive compensation, deferred compensation payments, lump sum payouts for accrued but unused vacation time, long-term disability insurance payments paid for the current or a prior year, overtime, or hours paid under the Bank's paid-time-off policies.

With respect to the NEOs' Annual Awards and Deferred Awards, 50% of an award to a Level I Participant will become earned and vested on the last day of the Performance Period (Annual Award), subject to the achievement of specified Bank performance goals over such period, the attainment of a specific minimum individual performance rating for such period, and active employment on the last day of such period (subject to certain limited exceptions relating to the circumstances of employment termination before the end of the Performance Period). The remaining 50% will become earned and vested on the last day of the Deferral Performance Period (Deferred Award), subject to the attainment of a specific minimum individual performance rating for each year of such period, and active employment on the last day of such period (subject to certain limited exceptions relating to the circumstances of employment termination before the end of the Deferral Performance Period), and further subject to the Bank's achievement during the Deferral Performance Period of additional performance goals relating to our profitability, retained earnings, regulatory capital-to-assets ratio, and distributions in compliance with AHP funding requirements (for Deferred Awards covering 2021-2023, 2022-2024, and 2023-2025) and relating to our regulatory capital-to-assets ratio, days of liquidity, maintaining sufficient capital to pay dividends and redeem/repurchase capital stock, and awards in compliance with AHP funding requirements (for Deferred Awards covering 2024-2026), through which the Level I Participant's compensation is impacted by our performance for a longer term. Depending on our performance during the Deferral Performance Period, the final award (i.e., the amount of the earned and vested Deferred Award ultimately paid to the Level I Participant) will be worth 75% at Threshold, 100% at Target or 125% at Maximum of the original amount of the Deferred Award. The level of achievement of those additional goals could thereby result in an increase or decrease to the Deferred Awards.

2023 Annual Award (Paid in 2024). The table below presents the incentive opportunity, earned, and deferred percentages of base salary for Level I Participants for the 2023 Performance Period.

	Total Incentive Opportunity as % of Base Salary			Total Incentive Earned and Vested at Year End			Total Incentive Deferred for 3 Years		
Position	**Threshold**	**Target**	**Maximum**	**Threshold**	**Target**	**Maximum**	**Threshold**	**Target**	**Maximum**
CEO	50.0%	80.0%	100.0%	25.0%	40.0%	50.0%	25.0%	40.0%	50.0%
EVP	40.0%	60.0%	80.0%	20.0%	30.0%	40.0%	20.0%	30.0%	40.0%
SVP	35.0%	52.5%	70.0%	17.5%	26.25%	35.0%	17.5%	26.25%	35.0%

Effective January 1, 2023, the board of directors established Annual Award Performance Goals for 2023 for Level I Participants relating to specific mission goals for financial performance; member activity; Enterprise Risk Management ("ERM"); learning & growth; diversity, equity and inclusion; and technology. The weights and specific achievement levels for each 2023 mission goal are presented below.

	Weighted Value		Performance Levels					Weighted Average Achievement	
2023 Mission Goals	**Bank [1]**	**ERM**	**Threshold**	**Target**	**Maximum**	**Actual Result**	**Achievement Percentage**	**Bank [1]**	**ERM**
Financial Performance									
Return on capital stock [2]	25%	15%	9.83%	10.74%	11.83%	13.97%	100%	25.0%	15.0%
Member Activity									
New product users [3]	15%	5%	57	88	166	176	100%	15.0%	5.0%
Member participation [4]	15%	10%	69%	72%	76%	83%	100%	15.0%	10.0%
Elevate [5]	5%	5%	50%	65%	75%	71%	90%	4.5%	4.5%
Enterprise Risk Management									
Achieve risk management objectives [6]	10%	35%	2 of 9 milestones	5 of 9 milestones	8 of 9 milestones	8 milestones	100%	10.0%	35.0%
Learning and Growth									
Corporate: Enhance employee skill sets with specialized training program [7]	5%	5%	25%	50%	75%	88%	100%	5.0%	5.0%
Individual:Further enhance employee skill sets by learning from SMEs [8]	2.5%	2.5%	50%	60%	70%	96%	100%	2.5%	2.5%
Individual:Train managers to successfully manage a hybrid/flexible workforce [9]	2.5%	2.5%	80%	90%	100%	83%	58%	1.5%	1.5%
Diversity, Equity, and Inclusion									
Focus on cultural awareness and issues impacting at risk, diverse, and/or underrepresented groups [10]	5%	5%	50%	65%	85%	73%	85%	4.3%	4.3%
Promote community engagement by encouraging volunteerism with a focus on DE&I [11]	5%	5%	400 hours	800 hours	1,200 hours	1,391 hours	100%	5.0%	5.0%
Technology									
Production implementation of technology initiatives [12]	10%	10%	1 Objective	3 Objectives	5 Objectives	2 Objectives	63%	6.3%	6.3%
Total	100%	100%						93.9%	93.9%

(1) For all NEOs other than the CRO. The CRO's weighted average achievement percentages are presented under the ERM column.

(2) For purposes of this goal, return on capital stock is defined as the Bank's core net income as a percentage of average total regulatory capital stock, rounded to the nearest basis point. Core net income represents GAAP net income adjusted to exclude: (i) mark-to-market adjustments and other transitory effects from derivatives and trading/hedging activities, (ii) interest expense on mandatorily redeemable capital stock, (iii) realized gains and losses on sales of investment securities, (iv) debt extinguishment costs, (v) Advance prepayment fees received in cash on unswapped Advances that are not restructured, (vi) accelerated amortization of concession fees on called COs, and (vii) other non-routine components of GAAP earnings that do not necessarily reflect the underlying results of the operations of the Bank. The Bank's accruals for incentive compensation are added back to core net income. Each adjustment, except for interest on MRCS, is net of the required AHP assessment. However, certain excluded amounts may require amortization included in other periods to properly state core net income. Assumes no material change in investment authority under the the Finance Agency's regulation, policy, directive, guidance, or law.

(3) A new product user is a member that utilizes one of the following products that they did not use in the prior calendar year (or others as may be approved by the Board): advances, letters of credit, lines of credit, MPP, AHP (competitive, set-aside or Elevate programs), or safekeeping. Any member that utilizes a qualifying product during the year will be counted even if that member ceases to be a member as of December 31, 2023. A member may be counted more than once toward the achievement of this goal if the member utilizes multiple products in the current calendar year that the member did not utilize in the prior calendar year. Goal assumes no material change in membership eligibility under the Finance Agency's regulation, policy, directive, guidance or law.

(4) Member participation is the percentage of members that utilize any one of the following products during the year (or others as may be approved by the Board): advances, letters of credit, lines of credit, MPP, or AHP (competitive, set-aside or Elevate programs). Any member that utilizes a qualifying product during the year will be counted in the numerator even if that member ceases to be a member as of December 31, 2023. Membership will be calculated as the simple average of the membership at the end of each month in 2023. New members are not included in the membership count until after 12 months of membership unless they participate in one of the Bank's products. If a new member participates in one of the Bank's products within 12 months of becoming a member, the participation will be included in the numerator and the member will be included in the calculation of the monthly average beginning with the month the member participated (as defined above). Goal assumes no material change in membership eligibility under the Finance Agency's regulation, policy, directive, guidance or law.

(5) This goal measures the percentage of Elevate applications that are received for small businesses that are women or minority owned.

(6) Status and reporting of this goal, and its attainment, will be provided in writing to the Risk Committee. Each objective has three milestones (Minimum, Target, or Maximum) for achievement, with the overall achievement level linearly interpolated between minimum achievement of 1 out of 9 milestones and maximum achievement of 8 out of 9 milestones. The Enterprise Risk Management Excellence objectives are:

- Objective #1: Geospatial Analysis. Analytical framework and capabilities utilizing geospatial analysis will be established, with completion of goal requirements reported to the Risk Committee by December 31, 2023. Achievement will be measured by the number of Bank portfolios analyzed using geospatial analysis. Analysis of a portfolio could consist of focusing on a key segment, such as collateral under delivery, or a select investment category and converted to a geospatial format. Primary focus of the analysis should be identifying concentration risk.
    - Minimum: 1 portfolio analyzed and reported using geospatial analysis
    - Target: 2 portfolios analyzed and reported using geospatial analysis
    - Maximum: 3 portfolios analyzed and reported using geospatial analysis
- Objective #2: CIP Advance valuation and analysis. Provide the Risk Committee with supplemental market risk reporting to bifurcate the valuation of CIP advances vs. non-CIP advances and present the impact on the ratio of the Bank's market value to book value. This requires a separate market risk process to be established and run on a regular basis. Proof of completion will be production of a new report or update of an existing report and completed procedures by the dates listed below.
    - Minimum: Provide by December 31, 2023
    - Target: Provide by September 30, 2023
    - Maximum: Provide by June 30, 2023

- Objective #3: Machine Learning Analysis. Educate ERM staff on machine learning and apply its techniques to develop and implement machine learning driven analysis, which could include anomaly and outlier detection, to assist in risk analysis. Analysis may include unsupervised learning process for cluster and anomaly/outlier analysis, to enhance risk oversight, measurement, and reporting. Achievement will be measured by the total hours of training completed and departmental-wide completed analysis implemented into a regular production report using machine learning. Acceptable courses and providers will be presented to the Risk Committee prior to the completion of the goal.
  - Minimum: ERM staff in aggregate complete at least 15 hours of training and ERM as a department will implement one machine learning analysis by December 31, 2023.
  - Target: ERM staff in aggregate complete at least 30 hours of training and ERM as a department will implement two machine learning analyses by December 31, 2023.
  - Maximum: ERM staff in aggregate complete at least 45 hours of training and ERM as a department will implement three machine learning analyses by December 31, 2023.

(7) This goal measures the percentage of employees completing at least 10 hours of training in the training platform. Eligible courses will be finalized by the Chief Human Resources Officer and shared with the Executive Management Committee (EMC). The denominator is the number of employees as of the first business day of 2023.

(8) This goal measures the percentage of employees participating in at least one session with a subject matter expert (SME). Sessions may be led by an internal or external SME and eligible topics will be finalized by the Chief Human Resources Officer and shared with the EMC. The denominator is the number of employees as of the first business day of 2023.

(9) This goal measures the percentage of managers completing training for successfully managing a hybrid/flexible workforce. The denominator is the number of managers as of the first business day of 2023.

(10) This goal measures the percentage of employees participating in at least two eligible cultural awareness events/ workshops/seminars and/or trainings (excluding annual bank wide mandatory DEI training), which must include a formal educational component with established learning objectives for participants. The denominator is the number of employees as of the first business day of 2023.

(11) This goal measures the number of bank wide volunteer hours used based upon input to the Bank's human capital management system. Qualifying volunteer opportunities include, but are not limited to, organizations and events supported and endorsed by the Bank's C.A.R.E. Committee. A maximum of 8 hours per employee will be counted toward achievement of this goal.

(12) Status and monitoring of this goal and its attainment, will be provided in writing to the Information Technology Steering Committee.
- ServiceNow (IT Service Management platform)
- IFS Credit Suite Modernization project
- Robotic Process Automation (PowerAutomate) with completion of 3 planned workflows for Financial Controls, Collateral Operations, and Internal Audit
- Wire System Enhancement Project
- Collateral System (MIAC C-Trac)

There is no guaranteed payout under the provisions of the Incentive Plan. Therefore, the minimum that could be paid out to an NEO was $0. The maximum amounts that could have been earned for the Annual Award Performance Period are presented below. The actual amounts earned are also presented below and in the Non-Equity Incentive Plan Compensation table.

			Maximum		Actual		
NEO	**Base Salary**	**Annual Award Opportunity**	**Weighted Average Achievement**	**Annual Award**	**Weighted Average Achievement [1]**	**Annual Award**	**Annual Award % of Salary**
Cindy L. Konich	$1,028,294	50%	100%	$ 514,147	94.5%	$ 485,766	47%
Gregory L. Teare	501,184	40%	100%	200,474	93.9%	188,305	38%
Brendan W. McGrath	460,112	40%	100%	184,045	93.9%	172,873	38%
Deron J. Streitenberger	497,820	40%	100%	199,128	93.9%	187,041	38%
Christopher S. Dawson	397,500	35%	100%	139,125	93.9%	130,680	33%

(1) Rounded to the nearest tenth of a percent. The Weighted Average Achievement for the CEO is different than the achievement for the other NEOs due to the interpolation of achievement for goals with an actual result greater than Threshold but less than Maximum as a result of Target achievement being worth 80% of Maximum for the CEO but 75% for the other NEOs.

2020 Deferred Award (Paid in 2024). Fifty percent of each Level I Participant's 2020 Award ("2020 Deferred Award") was deferred for a three-year period that ended December 31, 2023 ("2021-2023 Deferral Performance Period"). The 2020 Deferred Award became earned and vested on that date, subject to the achievement of specific Bank performance goals over the 2021-2023 Deferral Performance Period and other conditions described below. The following table presents the performance goals for the 2020 Deferred Award relating to our profitability, retained earnings and prudential management standards, together with actual results and specific achievement levels for each mission goal.

2021-2023 Mission Goals	Weighted Value	Performance Levels [1] Threshold	Target	Maximum	Actual Result	Achievement %	Weighted Average Achievement
Profitability [2]	35%	25 bps	50 bps	150 bps	478 bps	125%	44%
Retained Earnings [3]	35%	3.5%	3.9%	4.3%	6.8%	125%	44%
Prudential Standards (see below)	30%	Achieve 1 Prudential Standard	(a)	Achieve both Prudential Standards	2	125%	37%
Prudential Standard 1: Maintain a regulatory capital-to-assets ratio of at least 4.16% as measured on each quarter-end in 2021 through 2023.							
Prudential Standard 2: Award to FHLBI members the annual AHP funding requirement in each plan year.							
Total	100%						125%

(1) Deferred Awards are subject to additional performance goals for the Deferral Performance Period. Depending on our performance during the Deferral Performance Period, the Final Award will be worth 75% at Threshold, 100% at Target or 125% at Maximum of the original amount.

(2) Attainment of this goal was computed using the simple average of annual profitability measures over the three-year period. For purposes of this goal, profitability is defined as the Bank’s profitability rate in excess of the Bank’s cost of funds rate. Profitability is the Bank’s core net income reduced by the portion of net income to be added to restricted retained earnings under the JCEA and increased by the Bank’s accruals for incentive compensation, net of the AHP assessment. Core net income represents GAAP Net Income adjusted to exclude: (i) debt extinguishment costs and Advance prepayment fees received in cash on unswapped Advances that are not restructured, net of the AHP assessment, (ii) mark-to-market adjustments and other transitory effects from derivatives and trading/hedging activities, net of the AHP assessment, (iii) interest expense on MRCS, (iv) realized gains and losses on sales of investment securities, net of the AHP assessment, (v) accelerated amortization of concession fees on called COs, net of the AHP assessment, and (vi) other non-recurring components of GAAP earnings that do not necessarily reflect the underlying results of the operations of the Bank, net of the AHP assessment. However, certain excluded amounts may require amortization included in other periods to properly state core net income. The Bank’s profitability rate is profitability, as defined above, as a percentage of average total regulatory capital stock. This goal assumes no material change in investment authority under the the Finance Agency's regulation, policy, directive, guidance, or law.

Beginning in 2021, the definition of profitability was updated to reflect core net income (instead of adjusted net income) to further exclude realized gains and losses on sales of investment securities, accelerated amortization of concession fees on called COs, and other non-recurring components of GAAP earnings that do not necessarily reflect the underlying results of the operations of the Bank. Using adjusted net income to compute the simple average of the annual profitability measures over the three-year period would have had no impact on the achievement percentage of 125%.

(3) Total retained earnings divided by the sum of the carrying value of the MBS and AMA portfolios. The calculation is the simple average of 36 month-end calculations.

(a) There is no target level for this goal.

Each NEO received at least the minimum required performance rating for each year of the 2021-2023 Deferral Performance Period and each was employed by the Bank on the last day of that period, thereby satisfying the two remaining conditions applicable to our NEOs for payment of the 2020 Deferred Award.

The following table presents the payouts of the 2020 Deferred Awards to the NEOs by applying the total achievement level of the performance goals for the 2020 Deferred Award. These payouts are also presented in the Non-Equity Incentive Plan Compensation table.

2020 Deferred Award - 2021-2023 Performance Period

NEO	Total Award for 2020	Percentage Deferred	Deferred Amount	Total Achievement	Deferred Award Paid in 2024
Cindy L. Konich	$ 911,635	50%	$ 455,817	125%	$ 542,528
Gregory L. Teare	352,530	50%	176,265	125%	220,331
Brendan W. McGrath	221,037	50%	110,519	125%	138,148
Deron J. Streitenberger	306,148	50%	153,074	125%	191,343
Christopher S. Dawson	225,317	50%	112,659	125%	140,823

The 2020 Deferred Award paid in 2024 for Ms. Konich was reduced from $569,772 to $542,528 to comply with the terms of the Incentive Plan that limit the total incentive compensation paid for a performance period to the amount of the employee's base compensation for that year. This limit was reached primarily due to the Bank's base compensation in 2020 reflecting 27 bi-weekly pay periods rather than 26.

Other Incentive Plan Provisions. The Incentive Plan provides that a termination of service of a Level I Participant during a Performance Period or Deferral Performance Period may result in the forfeiture of the award. However, the Incentive Plan recognizes certain exceptions to this general rule if the termination of service is (i) due to the Level I Participant's death, "Disability," or "Retirement"; (ii) for "Good Reason"; or (iii) without "Cause" due to a "Reduction in Force" (in each case as defined in the Incentive Plan). If one of these exceptions applies, a Level I Participant's Annual Award or Deferred Awards generally will be treated as earned and vested, and will be calculated using certain assumptions with respect to our achievement of applicable performance goals for the applicable Performance Period or Deferral Performance Period. Additionally, payment of an award may be accelerated if the participant dies or becomes "Disabled" while an employee of the Bank, or if the termination is without "Cause" due to a "Reduction in Force".

The Incentive Plan provides that awards may be reduced or forfeited in certain circumstances. If, during a Deferral Performance Period, we realize actual losses or other measures or aspects of performance related to the Performance Period or Deferral Performance Period that would have caused a reduction in the final award for the Performance Period or Deferral Performance Period, the remaining amount of the final award to be paid at the end of the Deferral Performance Period will be reduced to reflect this additional information. In addition, all or a portion of an award may be forfeited at the direction of the board of directors if we have failed to remediate to the satisfaction of the board an unsafe or unsound practice or condition (as identified by the Finance Agency) that is material to our financial operation and within the Level I Participant's area(s) of responsibility. Under such circumstances, the board may also direct the cessation of payments for a vested award. Further, the board may reduce or eliminate an award that is otherwise earned but not yet paid if the board finds that a serious, material safety-soundness problem or a serious, material risk management deficiency exists at our Bank, or in certain other circumstances.

Retirement Benefits. We maintain a comprehensive retirement program for our employees, which includes our qualified (DB Plan) and non-qualified (SERP) defined benefit plans and our qualified (DC Plan) and non-qualified (SETP) defined contribution plans. The benefits provided by these plans are components of the total compensation opportunity for our employees. The board of directors believes these plans serve as valuable retention tools and provide significant tax deferral opportunities and resources for the participants' long-range financial planning. These plans are discussed below.

DB Plan and SERP. All employees who met the eligibility requirements and were hired before February 1, 2010 participate in the DB Plan, a tax-qualified, multiple employer defined benefit pension plan. The plan neither requires nor permits employee contributions. Pension benefits vest upon completion of five years of service. Benefits under the DB Plan are based upon compensation up to the annual compensation limit established by the Internal Revenue Service ("IRS"), which was $330,000 in 2023. In addition, benefits payable to participants in the DB Plan may not exceed a maximum benefit limit established by the IRS, which in 2023 was $265,000, payable as a single life annuity at normal retirement age.

In connection with the DB Plan, the board of directors established a supplemental non-qualified plan in 1993 in response to federal legislation that imposed restrictions on the retirement benefits otherwise earned by certain management or highly-compensated employees. The original supplemental non-qualified plan was frozen effective December 31, 2004, and is now referred to as the "Frozen SERP." A separate SERP ("2005 SERP") was established effective January 1, 2005 to conform to Internal Revenue Code Section 409A requirements. The SERP is an extension of our retirement commitment to the NEO participants and certain highly-compensated employees. The SERP restores the full pension benefits of NEO participants and certain other employees under the DB Plan that would otherwise be limited by IRS regulations regarding compensation, years of service or benefits payable. The DB Plan and SERP provide benefits based on a combination of a participant's length of service, age and annual compensation. In determining whether a participant is entitled to a restoration of retirement benefits, the SERP utilizes the identical benefit formula applicable to the DB Plan. Benefits payable under the 2005 SERP are reduced by (among other things) benefit amounts that would have been payable under the Frozen SERP, calculated as if the participant in the Frozen SERP had terminated employment on December 31, 2004. SERP benefits are funded by a grantor trust we have established as part of the Bank's general assets. The assets of the grantor trust are subject to the claims of our general creditors. Any rights created under the SERP are unsecured contractual rights of the participants against the Bank.

Our board of directors amended the DB Plan, effective for all employees hired on or after July 1, 2008, to provide a reduced benefit. All eligible employees hired on or before June 30, 2008 were grandfathered under the benefit formula and the terms of the DB Plan in effect as of June 30, 2008 ("Grandfathered DB Plan") and are eligible to continue under the Grandfathered DB Plan, subject to future plan amendments made by the board of directors. All eligible employees hired on or after July 1, 2008 but before February 1, 2010 are enrolled in the amended DB Plan ("Amended DB Plan").

During 2010, our board of directors discontinued eligibility in the Amended DB Plan for new employees. As a result, no employee hired on or after February 1, 2010 is enrolled in that plan, while participants in the Grandfathered DB Plan or Amended DB Plan as of January 31, 2010 continue to be eligible for the Grandfathered DB Plan or Amended DB Plan (and, as applicable, the 2005 SERP) and accrue benefits thereunder until termination of employment.

Effective August 1, 2021, our board of directors amended the 2005 SERP to enhance the retention of participating employees. The amendment provides greater predictability of the dollar amount of benefits payable upon separation of employment or retirement from the Bank. The applicable retirement plan interest rates and mortality tables used to calculate benefits are set as of May 2021 and June 2021, respectively, rather than as of the employee's date of separation of employment or retirement. The amendment included similar provisions for the calculation of death benefits payable, except that the applicable retirement plan interest rates and mortality tables are set as of July 2021 and June 2021, respectively. While the long-term impact of the amendment on employees' pension values is expected to be favorable to the employee, the amendment can have an unfavorable impact on employees' pension values in a particular year.

The following sections describe the differences in the benefits provided under these plans.

Grandfathered DB Plan. The estimated annual benefits are calculated in accordance with the formula currently in effect for specified years of service and compensation for individuals participating in both the Grandfathered DB Plan and the SERP, and hired prior to July 1, 2008, which includes Ms. Konich and Mr. McGrath.

- Formula: The combined Grandfathered DB Plan and SERP benefit equals 2.5% times years of benefit service times the high three-consecutive-year average compensation. Benefit service begins one year after employment, and benefits are vested after five years. Benefit payments commencing before age 65 are reduced by applying an early retirement factor based on the participant's age when payments begin. The allowance payable at age 65 would be reduced by 3.0% for each year the employee is under age 65. However, if the sum of age and years of vesting service at termination of employment is at least 70 ("Rule of 70"), the retirement allowance would be reduced by 1.5% for each year the employee is under age 65. Beginning at age 66, retirees are also provided an annual retiree cost of living adjustment of 3.0% per year.
- Example: The estimated annual benefits payable upon retirement at age 65 by combining the Grandfathered DB Plan and the SERP for an eligible employee with 25 years of benefit service and high 3-consecutive-year average compensation of $1,000,000 would be $625,000 ($1,000,000 * 2.5% * 25).

Amended DB Plan. The estimated annual benefits are calculated in accordance with the formula currently in effect for specified years of service and compensation for individuals participating in both the Amended DB Plan and the SERP, hired on or after July 1, 2008 but before February 1, 2010, which includes Mr. Teare.

- Formula: The combined Amended DB Plan and 2005 SERP benefit equals 1.5% times years of benefit service times the high five-consecutive-year average compensation. Benefit service begins one year after employment, and benefits are vested after five years. The allowance payable at age 65 would be reduced according to the actuarial equivalent based on actual age when early retirement commences. Benefit payments commencing before age 65 are reduced by applying an early retirement factor based on the participant's age when payments begin. If a participant satisfied the Rule of 70 at termination of employment, the retirement allowance would be reduced by 3.0% for each year the participant is under age 65.
- Example: The estimated annual benefits payable upon retirement at age 65 by combining the Amended DB Plan and the SERP for an eligible employee with 20 years of benefit service and high 5-consecutive-year average compensation of $1,000,000 would be $300,000 ($1,000,000 * 1.5% * 20).

The following table sets forth a comparison of the Grandfathered DB Plan and the Amended DB Plan.

DB Plan Provisions	**Grandfathered DB Plan (All Employees Hired on or before June 30, 2008)**	**Amended DB Plan (All Employees Hired between July 1, 2008 and January 31, 2010)**
Benefit Increment	2.5%	1.5%
Cost of Living Adjustment	3.0% Per Year Cumulative, Commencing at Age 66	None
Normal Form of Payment	Guaranteed 12 Year Payout	Life Annuity
Early Retirement Reduction for less than Age 65:		
(i) Rule of 70	1.5% Per Year	3.0% Per Year
(ii) Rule of 70 Not Met	3.0% Per Year	Actuarial Equivalent

With respect to all employees hired before February 1, 2010:

- Eligible compensation includes salary (before any employee contributions to tax qualified plans), short-term incentive, bonus (including Annual Awards under the Incentive Plan), and any other compensation that is reflected on the IRS Form W-2 (but not including long-term incentive payments, such as Deferred Awards under the Incentive Plan).
- Retirement benefits from the DB Plan are paid in the form of a lump sum, annuity, or a combination of the two, at the election of the retiree at the time of retirement. Any payments involving a lump sum are subject to spousal consent.
- Retirement benefits from the 2005 SERP may be paid in the form of a lump sum payment, or annual installments up to 20 years, or a combination of lump sum and annual payments.

DC Plans and SETP. The Bank maintains the DC Plan, a single employer retirement savings plan qualified under Internal Revenue Code Section 401(k).

All employees who have met the eligibility requirements may participate in the DC Plan. All of the NEOs participate in the DC Plan. The DC Plan generally provides for an immediate (after the first month of hire) fully vested employer match of 100% on the first 6% of base salary of the participant's biweekly contributions on a pre-tax, post-tax, and/or Roth basis.

Eligible compensation in the DC Plan is defined as base salary. A participant in the DC Plan may elect to contribute up to 50% of eligible compensation, subject to the following limits. Under IRS regulations, in 2023 an employee could contribute up to $22,500 of eligible compensation on a pre-tax basis, and an employee age 50 or over could contribute up to an additional $7,500 on a pre-tax basis. Participant contributions over that amount may be made on an after-tax basis but are also limited by Section 415 of the IRC. A total of $66,000 per year ($73,500 per year including catch-up contributions for employees age 50 or over) could have been contributed to a participant's account in 2023, including our matching contribution and the participant's pre-tax and after-tax contributions. In addition, no more than $330,000 of annual compensation could have been taken into account in computing eligible compensation in 2023. The amount deferred on a pre-tax basis is taxed to the participant as ordinary income when distributed from the DC Plan. The plan permits participants to self-direct the investment of their DC Plan account into one or more investment funds. All returns are at the market rate of the respective fund(s) selected by the participant.

The DC Plan also permits a participant (in addition to making pre-tax elective deferrals) to fund a separate "Roth Elective Deferral Account" (also known as a "Roth 401(k)") with after-tax contributions. A participant may make both pre-tax and Roth 401(k) contributions, subject to the limitations described in the preceding paragraph. All Bank contributions are allocated to the participant's DC Plan account, subject to the maximum match amount described above. Under current IRS rules, withdrawals from a Roth 401(k) account (including investment gains) are tax-free after the participant reaches age 59 1/2 and if the withdrawal occurs at least five years after January 1 of the first year in which a contribution to the Roth 401(k) account occurs. In addition, the DC Plan permits in-plan Roth conversions, which allow participants to convert certain vested contributions into Roth contributions, similar to a Roth Individual Retirement Account conversion.

Effective January 1, 2018, the board of directors established, within the DC Plan, an employer-funded non-elective contribution ("NEC") program. The NEC provides an additional employer-funded benefit for all employees who have met the eligibility requirements to participate in the DC Plan who were hired on or after February 1, 2010 and therefore do not participate in the Grandfathered DB Plan or the Amended DB Plan. The Bank makes this additional NEC of 4% of base salary per year to the DC Plan account of each participant. The NEC is subject to a vesting schedule based on a participant's years of service at the Bank. Partial vesting begins when a participant has attained at least two years of service. Participants become fully vested in their NECs when they have attained five years of service. Mr. Streitenberger and Mr. Dawson receive the NEC and are fully vested.

In November 2015, the board of directors established the SETP, effective January 1, 2016. As described below, the purpose of the SETP is to permit the NEOs and certain other employees to elect to defer compensation in addition to compensation deferred under the DC Plan. The DC Plan and SETP provide benefits based upon amounts deferred by the participant and employer-matching contributions.

Each DC Plan participant who is an officer with a title of First Vice President or more senior (which includes all NEOs) is automatically eligible to become a SETP participant. In addition, the board of directors in its discretion may designate other DC Plan participants as eligible to participate. The SETP constitutes a nonqualified deferred compensation arrangement that complies with Internal Revenue Code Section 409A regulations and permits a participant to elect to have all or a portion of such participant's base salary and/or annual incentive plan payment withheld and credited to the participant's SETP account. Under this plan, subject to certain limitations, the Bank will contribute to the participant's account each plan year, up to the contribution that would have been made for the benefit of the participant under the DC Plan, including, if applicable, the NECs described above, without regard to benefit or compensation limits imposed by the Internal Revenue Code. The plan permits participants to self-direct the investment of their SETP account into one or more investment funds. All returns are at the market rate of the respective fund(s) selected by the participant. Plan benefits are paid out of an investment account established for each participant under a grantor trust that we have established as part of our general assets. The assets of the grantor trust are subject to the claims of our general creditors. The trust is maintained such that the SETP is at all times considered unfunded and constitutes a mere promise by the Bank to make benefit payments in the future. Any rights created under this plan are unsecured contractual rights against the Bank.

Effective January 1, 2022, the board of directors authorized the Bank to begin making an additional NEC of 6% of base salary per year to the SETP ("SETP NEC") for executive officers that do not participate in either the Grandfathered DB Plan or the Amended DB Plan. The SETP NEC is subject to a vesting schedule based on a participant's years of service at the Bank. Partial vesting begins when a participant has attained at least two years of service. Participants become fully vested in their SETP NECs when they have attained five years of service. Mr. Streitenberger and Mr. Dawson are both fully vested in the SETP NEC.

The DB Plan, the 2005 SERP, the DC Plan and the SETP have all been amended from time to time to comply with changes in laws and IRS regulations and to clarify or modify other benefit features.

Perquisites and Other Benefits. We offer the following additional perquisites and other benefits to all employees, including the NEOs, under the same general terms and conditions:

- medical, dental, and vision insurance (subject to employee expense sharing);
- vacation leave, which increases based upon officer title and years of service;
- life and long-term disability insurance (the CEO, CFO, and CBOO are eligible for enhanced monthly benefits under our disability insurance program);
- travel and accident insurance, as well as special crime coverage, which include life insurance benefits;
- educational assistance;
- employee relocation assistance, where appropriate, for new hires; and
- student loan repayment assistance.

In addition, we provide as a taxable benefit to the NEOs and certain other officers limited spouse/guest travel to board of directors meetings and preapproved industry activities.

Potential Payments Upon Termination or Change in Control.

Severance Pay Plan. The board of directors has adopted a Severance Pay Plan that pays each NEO, upon a qualifying termination as described below (or in the Bank's discretion on a case-by-case basis), up to a maximum 52 weeks of base salary computed at the rate of four weeks of severance pay for each year of service with a minimum of eight weeks of base salary to be paid. In addition, the plan pays a lump sum amount equal to the NEO's cost to maintain health insurance coverage under a Consolidated Omnibus Budget Reconciliation Act ("COBRA")-like coverage for the time period applicable under the severance pay schedule. The Severance Pay Plan may be amended or eliminated by the board at any time. Receipt of benefits under the Severance Pay Plan is conditioned on the execution of a binding separation contract.

The Severance Pay Plan does not apply to NEOs who have entered into a KESA with the Bank or who are participants under the Bank's Key Employee Severance Policy ("KESP") if a qualifying event has triggered payment under the terms of the KESA or the KESP. As of the filing date of this Form 10-K, Ms. Konich is the only NEO with whom we have a KESA; all other NEOs are participants under the KESP. If any NEO's employment is terminated, but a qualifying event under the KESA or the KESP, as applicable, has not occurred, the provisions of the Severance Pay Plan apply.

The following qualifying events will trigger an NEO's right to severance benefits under the Severance Pay Plan:

- the elimination of a job or position;
- a reduction in force;
- a substantial job modification, to the extent the incumbent NEO is no longer qualified for, or is unable to perform, the restructured job;
- the reassignment of staff requiring the relocation by more than 75 miles of the NEO's primary residence; or
- termination of employment in connection with a reorganization, merger or other change of control of the Bank.

In addition, the Bank has discretion under the Severance Pay Plan to provide additional pay or outplacement services to amicably resolve employment separations involving our NEOs and other employees.

The following table presents the estimated amounts that would have been payable to the NEOs under the Severance Pay Plan if triggered as of December 31, 2023, absent a qualifying event that would result in payments under Ms. Konich's KESA or the KESP.

NEO	Months of COBRA	Cost of COBRA	Weeks of Salary	Cost of Salary	Total Severance
Cindy L. Konich	12	$ 22,399	52	$ 1,028,294	$ 1,050,693
Gregory L. Teare	12	22,399	52	501,184	523,583
Brendan W. McGrath	12	31,823	52	460,112	491,935
Deron J. Streitenberger	11	29,171	44	421,232	450,403
Christopher S. Dawson	10	26,519	40	305,769	332,288

The amounts listed above do not include payments and benefits to the extent that they are provided on a nondiscriminatory basis to NEOs generally upon termination of employment. These payments and benefits include:

- accrued salary and vacation pay;
- distribution of benefits under the DB Plan; and
- distribution of plan balances under the DC Plan.

Similarly, the amounts listed above also do not include payments from the SERP or the SETP. Amounts payable from the SERP may be found in the Pension Benefits Table. Account balances for the SETP may be found in the Non-Qualified Deferred Compensation Table.

Key Employee Severance Agreement and Key Employee Severance Policy. In general, key employee severance arrangements are intended to promote retention of certain officers in the event of discussions concerning a possible reorganization or change in control of the Bank, to ensure that merger or reorganization opportunities are evaluated objectively, and to provide compensation and other benefits to covered employees under certain circumstances in the event of a consolidation, change in control or reorganization of the Bank. As described in the following paragraphs, these arrangements provide for payment and, in some cases, continued and/or increased benefits if the officer's employment terminates under certain circumstances in connection with a reorganization, merger or other change in control of the Bank. If we were not in compliance with all applicable regulatory capital or regulatory leverage requirements at the time payment under the KESA or KESP becomes due, or if the payment would cause our Bank to fall below applicable regulatory requirements, the payment would be deferred until such time as we achieve compliance with such requirements. Moreover, if we were insolvent, have had a receiver or conservator appointed, or were in "troubled condition" at the time payment under an arrangement becomes due, the Finance Agency could deem such a payment to be subject to its rules limiting golden parachute payments.

Key Employee Severance Agreement. Ms. Konich's KESA was entered into during 2007. Under the terms of her agreement, Ms. Konich is entitled to a lump sum payment equal to a multiplier of the average of her three preceding calendar years':

- base salary (less salary deferrals), bonus, and other cash compensation;
- salary deferrals and employer matching contributions under the DC Plan and SETP; and
- taxable portion of automobile allowance, if any.

Ms. Konich is entitled to a multiplier of 2.99, if she terminates for "good reason" or is terminated "without cause" during a period beginning 12 months before and ending 24 months after a reorganization. This agreement also provides that benefits payable to Ms. Konich pursuant to the SERP would be calculated as if she were three years older and had three more years of benefit service. The agreement with Ms. Konich also provides her with coverage for 36 months under our medical and dental insurance plans in effect at the time of termination (subject to her payment of the employee portion of the cost of such coverage).

We do not believe payments to Ms. Konich under the KESA would be subject to the restriction on change-in-control payments under Internal Revenue Code Section 280G or the excise tax applicable to excess change-in-control payments, because we are exempt from these requirements as a tax-exempt instrumentality of the United States government. If it were determined, however, that Ms. Konich is liable for such excise tax payment, the agreement provides for a "gross-up" of the benefits to cover such excise tax payment. This gross-up of approximately $3.6 million is not shown as a component of the value of the KESA in the table below.

Further, the agreement with Ms. Konich provides that she will be reimbursed for all reasonable accounting, legal, financial advisory and actuarial fees and expenses she incurs with respect to execution of the agreement or at the time of payment under the agreement. The agreement also provides that Ms. Konich will be reimbursed for all reasonable legal fees and expenses she incurs if we contest the enforceability of the KESA or the calculation of the amounts payable under the agreement, so long as she is wholly or partially successful on the merits or the parties agree to a settlement of the dispute.

If a reorganization of our Bank had triggered payments under Ms. Konich's KESA on December 31, 2023, the value of the payments for her would have been approximately as follows:

Benefit	**Value**
2.99 times average of the 3 prior calendar years base salary, bonuses and other cash compensation paid to the executive except for salary deferrals which are included below	$ 5,666,482
2.99 times average of the executive's salary deferrals and employer matching contributions under the DC Plan and SETP for the 3 prior calendar years	335,520
Additional amount under the SERP equal to the additional benefit calculated as if the executive were 3 years older and had 3 more years of credited service	2,213,954
Medical and dental insurance coverage for 36 months	67,197
Reimbursement of reasonable accounting, legal, financial advisory, and actuarial services [1]	15,000
Total value of KESA	$ 8,298,153

[1] The amount of $15,000 for reimbursement of reasonable accounting, legal, financial advisory, and actuarial services is an estimate and does not represent a minimum or maximum amount that could be paid.

Key Employee Severance Policy. We maintain the KESP, which establishes three participation levels for covered employees: (i) Level 1 Participants, which include any Executive Vice President, (ii) Level 2 Participants, which include any Senior Vice President, and (iii) Level 3 Participants, which include any other officer designated by the HR Committee to be a Level 3 Participant from time to time. Thus, covered executives under the KESP (as of the filing date of this Form 10-K) include all NEOs other than Ms. Konich. Mr. Teare, Mr. McGrath, and Mr. Streitenberger are Level 1 Participants. Mr. Dawson is a Level 2 Participant.

Under the KESP, if the covered employee terminates for "good reason" or is terminated without "cause," in either case within six months before or 24 months after a reorganization, the covered employee is entitled to a lump-sum payment equal to a multiple (2.0 for Level 1 Participants, 1.5 for Level 2 Participants and 1.0 for Level 3 Participants) of the average of his or her three preceding calendar years' base salary (inclusive of amounts deferred under a qualified or nonqualified plan) and gross bonus (inclusive of amounts deferred under a qualified or nonqualified plan); provided that, for any calendar year in which the covered employee received base salary for less than the entire year, the gross amount shall be annualized as if such amount had been payable for the entire calendar year. All amounts payable under the KESP are capped at an amount equal to one dollar ($1) less than the aggregate amount which would otherwise cause any such payments to be considered a "parachute payment" within the meaning of Section 280G of the Internal Revenue Code.

In addition, to the extent the covered employee is eligible, he or she will continue after a compensated termination to be covered by the Bank's medical and dental insurance plans in effect immediately prior to the compensated termination, subject to the covered employee's payment of the employee's portion of the cost of such continued coverage. The coverage will continue for Level 1, Level 2 and Level 3 Participants for 24 months, 18 months and 12 months, respectively. In the event the covered employee is ineligible under the terms of such plans for continuing coverage or such plans shall have been modified, the Bank will provide through other sources coverage which is substantially equivalent to the coverage provided immediately prior to the compensated termination, subject to the covered employee's payment of a comparable portion of the cost of such continued coverage as under the Bank's medical and dental insurance plans. The KESP also provides for outplacement services for all covered employees.

The following table presents the amounts that would have been payable under the KESP if triggered as of December 31, 2023:

NEO	Amount
Gregory L. Teare	$ 1,771,241
Brendan W. McGrath	1,302,243
Deron J. Streitenberger	1,622,765
Christopher S. Dawson	845,953

Summary Compensation Table

Name and Principal Position	Year	Salary (1)	Non-Equity Incentive Plan Compensation (2)	Change in Pension Value and Nonqualified Deferred Compensation Earnings (3)	All Other Compensation (4)	Total
Cindy L. Konich (5) CEO (PEO)	2023	$ 1,028,294	$ 1,028,294	$ 2,274,000	$ 21,647	$ 4,352,235
	2022	988,744	960,370	1,713,000	61,189	3,723,303
	2021	959,946	1,006,129	—	59,480	2,025,555
Gregory L. Teare (6) EVP - CFO (PFO)	2023	501,184	408,636	123,000	31,118	1,063,938
	2022	484,236	376,267	—	30,074	890,577
	2021	470,132	389,358	115,000	29,334	1,003,824
Brendan W. McGrath (7) EVP - CRO	2023	460,112	311,021	641,000	15,893	1,428,026
	2022	442,415	272,721	—	18,290	733,426
	2021	413,472	158,658	356,000	25,857	953,987
Deron J. Streitenberger EVP - CBOO	2023	497,820	378,384	—	63,912	940,116
	2022	467,437	338,191	—	75,657	881,285
	2021	436,857	310,987	—	44,637	792,481
Christopher S. Dawson (8) SVP - CIO	2023	397,500	271,503	—	53,642	722,645
	2022	375,000	246,866	—	48,913	670,779

(1) Salary reflects 26 biweekly pay periods.

(2) The Non-Equity Incentive Plan Compensation table below presents the components of the "Non-Equity Incentive Plan Compensation" column and the dates that these amounts were paid.

(3) These amounts represent a change in pension value under the Grandfathered DB Plan, Amended DB Plan and the SERP, as applicable. No NEO received preferential or above-market earnings on deferred compensation.

(4) Includes contributions to the DC Plan, NEC program, the SETP, and the SETP NEC, as applicable, for Ms. Konich ($19,800), Mr. Teare ($30,071), Mr. McGrath ($14,865), Mr. Streitenberger ($62,869), and Mr. Dawson ($52,644). Includes life insurance policy premiums and income tax gross-ups provided to all employees related to gift cards. Also includes companion travel expenses and years of service awards, as applicable. None of the NEOs received more than $10,000 in perquisites or other personal benefits and there were no other perquisites or benefits that are available to the NEOs that are not available to all other employees.

(5) Ms. Konich is our Principal Executive Officer. The change in pension values under the DB Plan and SERP for Ms. Konich in 2021 was a decrease of $1,462,000. In accordance with SEC guidance, the amount reported in the table is $0.

(6) Mr. Teare is our Principal Financial Officer. The change in pension values under the DB Plan and SERP for Mr. Teare in 2022 was a decrease of $57,000. In accordance with SEC guidance, the amount reported in the table is $0.

(7) The change in pension values under the DB Plan and SERP for Mr. McGrath in 2022 was a decrease of $758,000. In accordance with SEC guidance, the amount reported in the table is $0.

(8) Mr. Dawson was not an NEO for 2021.

No portion of the change in pension value was received by any of the NEOs; in fact, no portion of the change in pension value will be realizable or made available to any of the NEOs until a qualifying event, such as retirement, occurs. The change in pension value represents the difference between the present value of pension benefits accrued through the beginning and ending valuation dates and is based on the provisions of the applicable plan and the portion of each NEO's total pension benefits that are derived from each applicable plan. The calculations incorporate various assumptions and changes in compensation, age and tenure, and utilize discount interest rates based on applicable interest rates. Therefore, changes in applied interest rates can have a significant impact on the change in pension value. See the *Pension Benefits* section below for more information about the pension values as of December 31, 2023, including the assumptions and discount interest rates used.

Non-Equity Incentive Plan Compensation

Name	Year	Annual Award Amounts Earned [1]	Deferred Award Amounts Earned [1] [2]	Total Non-Equity Incentive Plan Compensation
Cindy L. Konich	2023	$ 485,766	$ 542,528	$ 1,028,294
	2022	494,372	465,998	960,370
	2021	453,478	552,651	1,006,129
Gregory L. Teare [3]	2023	188,305	220,331	408,636
	2022	193,694	182,573	376,267
	2021	175,077	214,281	389,358
Brendan W. McGrath [4]	2023	172,873	138,148	311,021
	2022	176,966	95,755	272,721
	2021	158,658	—	158,658
Deron J. Streitenberger [5]	2023	187,041	191,343	378,384
	2022	186,975	151,216	338,191
	2021	162,686	148,301	310,987
Christopher S. Dawson [6]	2023	130,680	140,823	271,503
	2022	131,250	115,616	246,866

(1) The amounts payable (i.e., not deferred) for the Annual Award and the Deferred Award were paid on March 1, 2024, March 3, 2023, and March 4, 2022, for 2023, 2022, and 2021, respectively.

(2) Amounts earned in 2023, 2022, and 2021 represent the 2020, 2019, and 2018 Deferred Awards, respectively.

(3) Mr. Teare elected to defer 10% of his 2023 Annual Award payable in 2024 pursuant to the terms of the SETP.

(4) Mr. McGrath elected to defer 15% of each of his 2023 Annual Award and 2020 Deferred Award, both payable in 2024, and 15% of his 2021 Annual Award payable in 2022 pursuant to the terms of the SETP. Mr. McGrath was not eligible for a 2018 Deferred Award.

(5) Mr. Streitenberger elected to defer 5% of his 2023 Annual Award and 10% of his 2020 Deferred Award, both payable in 2024, and 10% of his 2018 Deferred Award payable in 2022 pursuant to the terms of the SETP.

(6) Mr. Dawson elected to defer 20% of his 2023 Annual Award payable in 2024 pursuant to the terms of the SETP.

Grants of Plan-Based Awards Table for 2023

			Estimated Future Payouts Under Non-Equity Incentive Plans		
Name	**Plan Name**	**Grant Date**	**Threshold** (1) (2)	**Target**	**Maximum**
Cindy L. Konich	Incentive Plan - Annual	01/01/23	$ 257,074	$ 411,318	$ 514,147
	Incentive Plan - Deferred	01/01/23	364,325	485,766	607,208
Gregory L. Teare	Incentive Plan - Annual	01/01/23	100,237	150,355	200,474
	Incentive Plan - Deferred	01/01/23	141,229	188,305	235,381
Brendan W. McGrath	Incentive Plan - Annual	01/01/23	92,022	138,034	184,045
	Incentive Plan - Deferred	01/01/23	129,655	172,873	216,092
Deron J. Streitenberger	Incentive Plan - Annual	01/01/23	99,564	149,346	199,128
	Incentive Plan - Deferred	01/01/23	140,281	187,041	233,801
Christopher S. Dawson	Incentive Plan - Annual	01/01/23	69,563	104,344	139,125
	Incentive Plan - Deferred	01/01/23	98,010	130,680	163,350

(1) The Incentive Plan - Annual payout is the amount expected to be paid when meeting the respective achievement level for each of the components of the 2023 Annual Award Performance Period Goals. There was no guaranteed payout under the 2023 Annual Award provisions of the Incentive Plan. Therefore, the minimum that could be paid out under this plan is $0 for each NEO.

(2) The Incentive Plan - Deferred threshold payout is based upon the amount earned under the Incentive Plan - Annual and is further dependent on attaining the threshold over the Deferral Performance Period (2024-2026). The threshold is the amount expected to be paid when meeting the threshold for achievement under the Deferred Award provisions of the Incentive Plan over the three-year period. Depending on our performance during the Deferral Performance Period, the Final Award will be worth 75% at Threshold, 100% at Target or 125% at Maximum of the original amount of the Deferred Award (from the Incentive Plan - Annual Award Performance Period table previously presented). There is no guaranteed payout under the Deferred Award provisions of the Incentive Plan. Therefore, the minimum that could be paid out to an NEO under this plan is $0.

The Non-Equity Incentive Plan Compensation - 2023 table previously presented shows the amounts actually earned and paid under the 2023 Annual Award provisions of the Incentive Plan.

Pension Benefits

Name (1)	**Plan Name**	**Number of Years of Credited Service** (2)	**Present Value of Accumulated Benefits**	**Payments During Last Fiscal Year**
Cindy L. Konich (3)	DB Plan	39	$ 3,898,000	$ —
	SERP	39	26,673,000	—
Gregory L. Teare (4)	DB Plan	21	863,000	—
	SERP	15	1,119,000	—
Brendan W. McGrath (5)	DB Plan	23	1,291,000	—
	SERP	23	1,394,000	—

(1) Mr. Streitenberger and Mr. Dawson are not eligible to participate in the DB Plan or the SERP.

(2) For each of the NEOs, the years of credited service have been rounded to the nearest whole year.

(3) Ms. Konich is eligible to retire under the DB Plan and SERP due to the combination of her age and years of credited service.

(4) Mr. Teare earned six years of credited service in the DB Plan as an employee of the FHLBank of Seattle and is eligible to retire under the DB Plan and SERP due to the combination of his age and years of credited service.

(5) Mr. McGrath is not eligible to retire under the DB Plan and SERP.

No portion of the present value of accumulated benefits is realizable or available to the NEOs until a qualifying event, such as retirement, occurs. Such values are determined by calculating the present values of accumulated benefits accrued through the valuation date. The calculations incorporate the provisions of the applicable plan, the portion of an NEO's total pension benefits that are derived from each plan, various assumptions, and changes in compensation, age and service, and utilize discount interest rates based on market interest rates or the rates specified in the plan. The present value of the accumulated benefits is based upon a retirement age of 65. Benefits under the DB Plan are based on a discount rate of 4.83% and the PRI-2012 white collar worker annuitant tables (with Scale MP-2021) for qualified annuities or the IRS applicable mortality table for 2023 for qualified lump sums. SERP benefits are based on age 65 lump sums valued with IRS May 2021 Lump Sum Segment Rates (0.61%, 2.84%, 3.54%), discounted to current age at 4.69% and the IRS applicable mortality table for 2021. The discount rates for the DB Plan and the SERP are based on the Financial Times Stock Exchange ("FTSE") Pension Liability Index and the FTSE Pension Discount Curve, respectively, both of which are determined by yields on high-quality corporate bonds at the valuation dates.

Non-Qualified Deferred Compensation - 2023

Name	NEO Contributions in Last FY (1)	Bank Contributions in Last FY (2)	Aggregate Earnings in Last FY (3)	Aggregate Withdrawals / Distributions in Last FY	Aggregate Balance at Last FYE (4)
Cindy L. Konich	$ —	$ —	$ 193,855	$ —	$ 1,044,666
Gregory L. Teare	94,886	10,271	66,713	—	598,083
Brendan W. McGrath	40,908	—	59,910	—	385,752
Deron J. Streitenberger	15,122	29,869	27,271	—	205,135
Christopher S. Dawson	26,250	23,850	10,715	—	82,564

(1) Of the contributions by Mr. Teare, $85,201 are included in the "Salary" reported in the Summary Compensation Table for 2023 and $9,685 reflect the amount deferred related to the 2022 Annual Award included as part of "Non-Equity Incentive Plan Compensation" in the Summary Compensation Table for 2022.
Of the contributions by Mr. McGrath, $14,363 reflect the amount deferred related to the 2019 Deferred Award and $26,545 reflects the amount deferred related to the 2022 Annual Award, both of which were included as part of "Non-Equity Incentive Plan Compensation" in the Summary Compensation for 2022.
The contributions by Mr. Streitenberger reflect the amount deferred related to the 2019 Deferred Award included as part of "Non-Equity Incentive Plan Compensation" in the Summary Compensation Table for 2022.
The contributions by Mr. Dawson reflect the amount deferred related to the 2022 Annual Award included as part of "Non-Equity Incentive Plan Compensation" in the Summary Compensation Table for 2022.
Contributions are net of certain taxes, as applicable.

(2) The amounts are included as a component of "All Other Compensation" in the Summary Compensation Table. In addition, the amounts for Mr. Streitenberger and Mr. Dawson include the portion of the NEC in excess of the IRS limit applicable to the DC Plan.

(3) The amounts are not reported in the Summary Compensation Table because these amounts are not above market or preferential.

(4) The amounts have been reported in the Summary Compensation Table either in 2023 or prior years, with the exception of aggregate earnings.

The SETP is described in more detail above in "Retirement Benefits - DC Plan and SETP." Participants in the SETP elect the timing of distribution of their benefits; provided, however, that a participant is permitted to withdraw all or a portion of the amount in his or her account, in a single lump sum, if the participant has experienced an unforeseeable emergency (as defined by the SETP and determined by an administrative committee appointed by our board) or in certain other, limited circumstances. None of the NEOs made a withdrawal or received a distribution from the SETP during 2023.

Principal Executive Officer Pay Ratio Disclosure

Our CEO is our Principal Executive Officer ("PEO"). As described below, for the year ended December 31, 2023, we determined the ratio of the total compensation, as determined in the Summary Compensation Table ("Total Compensation"), of our PEO to the Total Compensation of the Bank's median employee.

Total Compensation includes, among other components, salary, non-equity incentive compensation, and change in pension value. Amounts reported as change in pension value are attributable to the Bank's Grandfathered DB Plan, Amended DB Plan and the SERP, as applicable. Such change in pension value represents the difference between the present value of pension benefits accrued through the beginning valuation date and the present value of pension benefits accrued through the ending valuation date. The present value calculations incorporate many assumptions and utilize discount rates based on market interest rates. Therefore, changes in market interest rates can have a significant impact on the change in pension value. Additionally, the change in pension value varies considerably among employees based upon their tenure at the Bank, their annual compensation and several other factors. Finally, no portion of this change in pension value was received by the PEO or median employee; in fact, no portion of the change in pension value will be realizable or made available to the PEO or median employee until a qualifying event, such as retirement, occurs.

For 2023, the Total Compensation of the PEO was $4,352,235. As of December 31, 2023, our PEO had 39 years of credited service under the Grandfathered DB Plan and SERP. Her Total Compensation therefore includes the change in the present value of her pension benefits of $2,274,000, and, as a result, constituted 52% of her reported 2023 Total Compensation.

As required by SEC rules, we reevaluated our employees to identify a new median employee for our pay ratio disclosures in 2023. As a result of this review, we selected a different employee than was identified with our 2020 calculations. As in 2020, for each of our full-time and part-time employees on the last pay date of 2023, we first determined the actual or annualized total of salary, wages, bonuses (if any) and incentive awards (collectively, "cash compensation") for 2023. We then ranked the 2023 annual cash compensation for all such employees from lowest to highest, excluding the PEO.

The employee at the median based on cash compensation does not participate in any pension plan. We therefore selected as the median employee the individual whose 2023 annual cash compensation was closest to that of the actual median employee and who participates in the same pension plan as our PEO (the Grandfathered DB Plan). We made no other material assumptions or adjustments in identifying the median employee. We then calculated the median employee's Total Compensation in the same manner that we calculated Total Compensation for the PEO. This approach ensures that the median employee's Total Compensation, like the PEO's Total Compensation, includes a change in pension value under the same plan and thereby provides an appropriate comparison.

For 2023, the Total Compensation of the median employee was $313,122. As of December 31, 2023, our median employee had 29 years of credited service in the DB Plan. The median employee's Total Compensation therefore includes the change in the present value of pension benefits of $165,000. As a result, the ratio of the PEO’s Total Compensation to that of the median employee was 14:1. Excluding the 2023 changes in pension value from the Total Compensation of both the PEO and the median employee, the ratio was 14:1.

Director Compensation

Finance Agency regulations provide that each FHLBank may pay its directors reasonable compensation for the time required of them and their necessary expenses in the performance of their duties, as determined by a compensation policy to be adopted annually by the FHLBank's board of directors. The Finance Agency Director annually reviews the compensation and expenses of FHLBank directors and has the authority to determine that the compensation and/or expenses paid to directors are not reasonable. In such case, the Director could order the FHLBank to refrain from making any further payments; however, such an order would only be applied prospectively and would not affect any compensation earned but unpaid or expenses incurred but not yet reimbursed.

2023 Compensation. In November 2022, after considering McLagan market data research and a director fee comparison among the FHLBanks, the board of directors adopted a director compensation and expense reimbursement policy for 2023 ("2023 Policy"). Under the 2023 Policy, each director had an opportunity to earn an annual fee (divided into quarterly payments), subject to the combined fee limit shown below. The fees were intended to reflect the time required of directors in the performance of official Bank and board business, measured principally by meeting attendance thresholds and participation at board and committee meetings and secondarily by performance of other duties, which include:

- preparing for board and committee meetings;
- chairing meetings as appropriate;
- reviewing materials sent to directors on a periodic basis;
- attending other related events such as management conferences, FHLBank System meetings, director training and new director orientation; and
- fulfilling the responsibilities of directors.

Additional compensation is paid for serving as chair or vice chair of the board of directors or as chair of a board committee. Because we are a cooperative and only member institutions may own our stock, no director may receive equity-based compensation. The 2023 Policy provides that director fees were to be paid at the end of each quarter.

The 2023 Policy authorizes a reduction of a director’s fourth quarterly payment if a majority of disinterested directors determines that such director’s performance, ethical conduct or attendance is significantly deficient. No such reductions occurred for 2023.

The following table summarizes the annual fee limits of the 2023 Policy as approved by the board of directors.

Position	Annual Fee Limit
Chair	$ 150,520
Vice Chair	134,090
Audit Committee Chair	133,030
Affordable Housing Committee Chair	129,850
Finance/Budget Committee Chair	129,850
Human Resources Committee Chair	129,850
Risk Oversight Committee Chair	133,030
Technology Committee Chair	129,850
All other directors	118,720
Other Committee Chair	(a)

(a) Directors serving as Chair of newly-formed Committees, or serving as Chair of an additional Committee, were entitled to an additional $10,000 fee per year, prorated by the number of quarters for which the director served as Chair.

Director Compensation Table for 2023

Name	Fees Earned or Paid in Cash	Total
Michael E. Bosway	118,720	118,720
Clifford M. Clarke	118,720	118,720
Kathryn M. Dominguez (1)	89,040	89,040
Robert M. Fisher	134,090	134,090
Karen F. Gregerson	150,520	150,520
Charlotte C. Henry	129,850	129,850
Perry G. Hines	118,720	118,720
Kenneth Kelly (1)	89,040	89,040
Robert D. Long	133,030	133,030
Michael J. Manica	129,850	129,850
Larry W. Myers	133,030	133,030
Christine Coady Narayanan	129,850	129,850
Sherri L. Reagin	118,720	118,720
Todd E. Sears	129,850	129,850
Ryan M. Warner	118,720	118,720

(1) Ms. Dominguez and Mr. Kelly were elected to the Board effective April 1, 2023. The Fees Earned or Paid in Cash represent fees earned on a pro rata basis for service from that date.

We provide various travel, accident, and kidnapping insurance coverages for all of our directors, officers and employees. These policies provide a life insurance benefit in the event of death within the scope of the policy. We also reimburse directors or directly pay for reasonable travel and related expenses in accordance with the director compensation and travel reimbursement policy.

Directors' Deferred Compensation Plan. In 2015, we established the DDCP, effective January 1, 2016. The DDCP permits members of our board of directors to elect to defer all or a portion of the fees payable to them for a calendar year for their services as directors. The DDCP constitutes a deferred compensation arrangement that complies with Section 409A of the Internal Revenue Code, as amended. Any duly elected and serving member of our board may become a participant in the DDCP. The DDCP was amended and restated effective January 1, 2021 to increase flexibility as to when distributions may be made.

All contributions credited to a participant’s account will be invested in an irrevocable grantor trust established to provide for the DDCP's benefits. The DDCP is administered by an administrative committee appointed by our board, currently the HR Committee. The trust will be maintained such that the DDCP at all times for income tax purposes will be unfunded and constitutes a mere promise by the Bank to make DDCP benefit payments in the future. Any rights created under the DDCP are unsecured contractual rights against the Bank. The Bank establishes an investment account for each participant under the trust, which at all times remains an asset of the Bank, subject to claims of the Bank’s general creditors. The DDCP permits participants to allocate their investment account among investment options established by the HR Committee or the board. No above-market or preferential earnings are paid on any balances under the DDCP. In general, a participant may elect to have his or her deferred compensation paid in a single lump sum payment, in annual installment payments over a period of two to five years, or in a combination of both such methods.

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

The following table sets forth the beneficial ownership of our Class B common stock as of February 29, 2024, by each shareholder that beneficially owned more than 5% of the outstanding shares. Each shareholder named (with its parent holding company) has sole voting and investment power over the shares beneficially owned.

Name and Address of Shareholder	Number of Shares Owned	% of Outstanding Shares
Flagstar Bank, N.A. - 102 Duffy Avenue, Hicksville, NY	3,286,357	12.2 %
Old National Bank - 123 Main Street, Evansville, IN	2,292,041	8.5 %
The Lincoln National Life Insurance Company - 1301 S Harrison Street, Fort Wayne, IN	1,674,000	6.2 %
Total	7,252,398	26.9 %

The majority of our directors are officers and/or directors of our members. The following table sets forth the members that have an officer and/or director serving on our board of directors as of February 29, 2024.

Director Name	Name of Member	Number of Shares Owned by Member	% of Outstanding Shares
Jacqueline L. Buchanan	Genisys Credit Union	85,500	0.32 %
Clifford M. Clarke	Three Rivers Federal Credit Union	167,837	0.62 %
Robert M. Fisher	Lake-Osceola State Bank	15,903	0.06 %
Karen F. Gregerson	The Farmers Bank	45,308	0.17 %
Margaret M. Lamb	People Driven Credit Union	13,500	0.05 %
Larry W. Myers	First Savings Bank	231,309	0.86 %
Ryan M. Warner	The Bippus State Bank	41,719	0.16 %
Total		601,076	2.24 %

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

We use acronyms and terms throughout this Item that are defined herein or in the *Defined Terms.*

Related Parties

We are a cooperative institution and owning shares of our stock is generally a prerequisite to transacting business with us. As such, we are wholly-owned by financial institutions that are also our customers (with the exception of shares held by former members, or their legal successors, in the process of redemption). In addition, a majority of our directors serve as officers and/or directors of our members, and we conduct our advances and AMA business almost exclusively with our members. Therefore, in the normal course of business, we extend credit to and purchase mortgage loans from members with officers or directors who may serve as our directors. However, such transactions are on substantially the same terms, including interest rates and collateral, as those prevailing at the time for comparable transactions with persons not related to us (i.e., other members), and that do not involve more than the normal risk of collectability or present other unfavorable terms.

Also, in the normal course of business, some of our member directors and independent directors are officers of entities that may directly or indirectly participate in our AHP. All AHP transactions, however, including those involving (i) a member (or its affiliate) that owns more than 5% of the Bank's capital stock, (ii) a member with an officer or director who serves as our director, or (iii) an entity with an officer, director or general partner who serves as our director (and that has a direct or indirect interest in the AHP transaction), are subject to the same eligibility and other program criteria and requirements and the same Finance Agency regulations governing AHP operations.

We do not extend credit to or conduct other business transactions with our directors, executive officers or any of our other officers or employees. Executive officers may obtain loans under certain employee benefit plans but only on the same terms and conditions as are applicable to all employees who participate in such plans.

Related Transactions

We have a Code of Conduct and Conflict of Interest Policy for Directors, a Code of Conduct and Conflict of Interest Policy for Affordable Housing Advisory Council ("AHAC") Members, a Code of Conduct and Conflict of Interest Policy for Employees and Contractors, and a Code of Ethics for Senior Financial Officers (collectively, "codes"). These codes require all directors, AHAC members, officers and employees to disclose any related party interests through ownership or family relationship. These disclosures are reviewed to determine the potential for a conflict of interest. The review is performed by our ethics officers for disclosures relating to officers and employees, and by our General Counsel and board of directors (or, when appropriate, the disinterested members of our board of directors) for directors and AHAC members. In the event of a conflict, appropriate action is taken, which may include: recusal of a director from the discussion and vote on a transaction in which the director has a related interest; removal of an employee from a project with a related party vendor; disqualification of related vendors from transacting business with us; requiring directors, officers or employees to divest their ownership interest in a related party; or removal of an AHAC member. The General Counsel and ethics officers maintain records of all related party disclosures, and there have been no transactions involving our directors, officers or employees that would be required to be disclosed herein.

Director Independence

General. As of the filing date of this Form 10-K, the board has 15 directorships, consisting of eight member and seven independent directorships. However, one member seat is vacant, resulting in 14 filled seats. Pursuant to the Bank Act, member directors and independent directors were elected or re-elected by our member institutions. None of our directors are "inside" directors, that is, none of our directors are employees or officers of our Bank. Further, our directors are prohibited from personally owning stock in our Bank. Each of our member directors, however, is a senior officer or director of an institution that is our member and may engage in transactions with us on a regular basis.

Our board of directors is required to evaluate and report on the independence of our directors under two distinct director independence standards. First, Finance Agency regulations establish independence criteria for directors who serve as members of our Audit Committee. Second, SEC rules require that our board of directors apply the independence criteria of a national securities exchange or automated quotation system in assessing the independence of our directors.

Finance Agency Regulations Regarding Independence. The Finance Agency director independence standards prohibit an individual from serving as a member of our Audit Committee if he or she has one or more disqualifying relationships with the Bank or our management that would interfere with the exercise of his or her independent judgment. Relationships considered to be disqualifying by our board of directors are: employment with us at any time during the last five years; acceptance of compensation from us other than for service as a director; serving as a consultant, advisor, promoter, underwriter or legal counsel for our Bank at any time within the last five years; and being an immediate family member of an individual who is or who has been an Executive Officer within the past five years. Our board of directors assesses the independence of each director under the Finance Agency's independence standards, regardless of whether he or she serves on the Audit Committee. As of the date of this Form 10-K, each of our directors is "independent" under these criteria relating to disqualifying relationships.

SEC Rules Regarding Independence. SEC rules require our board of directors to adopt a standard of independence with which to evaluate our directors. Pursuant thereto, our board adopted the independence standards of the New York Stock Exchange ("NYSE").

Independent Directors. As noted above, some of our directors who are "independent" (as defined in and for purposes of the Bank Act) are employed by companies that may from time to time have (or seek to have) limited business relationships with us due to those companies' participation in projects funded in part through our AHP. Any business relationship between those directors' respective companies and the Bank is established and conducted on the same terms and conditions provided to similarly-situated third parties. After applying the NYSE independence standards, our board determined that, as of the date of this Form 10-K, the seven directors currently seated (Directors Bosway, Dominguez, Goss-Foster, Henry, Hines, Sears and Wilson) who are "independent" directors, as defined in and for purposes of the Bank Act, are also independent under the NYSE standards.

In making this determination, we considered Director Wilson's role as President and CEO of Communities First, Inc. ("Company"), a state-wide nonprofit community development corporation. The Company is the sponsor for various projects for which AHP funds have been awarded by the Bank in the past. In 2020, the Bank awarded $0.5 million in funds to a project sponsored by the Company, which funds were disbursed in 2022. In 2022 and 2023, a total of two projects sponsored by the Company were awarded AHP funds in the amounts of $0.5 million and $0.6 million, respectively; however, no disbursements of these awarded AHP funds have been made as of the filing date of this Form 10-K.

Member Directors. Based upon the fact that each member director is a senior officer or director of an institution that is a member of the Bank (and thus the member is an equity holder in the Bank), that each such institution may routinely engage in transactions with us (which may include advances, MPP and AHP transactions), and that such transactions may occur frequently in the ordinary course of our business and our member institutions' respective businesses, our board of directors concluded for the present time that none of the member directors meet the independence criteria under the NYSE independence standards. It is possible that, under a strict reading of the NYSE objective criteria for independence (particularly the criterion regarding the amount of business conducted with us by the director's institution), a member director could meet the independence standard on a particular day. However, because the amount of business conducted by a member director's institution may change frequently, and because we generally desire to increase the amount of business we conduct with each member institution, we believe it is inappropriate to draw distinctions among the member directors based upon the amount of business conducted with us by any director's institution at a specific time.

Audit Committee and Human Resources and Compensation Committee Independence Standards. The board of directors has a standing Audit Committee and a standing Human Resources and Compensation Committee. For the reasons noted above, the board of directors determined that none of the current member directors on these committees (including Directors Buchanan, Fisher, Lamb, Myers, Warner, and Gregerson (ex-officio)) are "independent" under the NYSE standards. The board determined that all of the independent directors on these committees (including Directors Dominguez, Goss-Foster, Henry, Hines and Wilson) are independent under NYSE standards.

Additional Audit Committee Independence Standard. Audit Committee members are subject to further tests of independence under the NYSE standards. To be considered independent under those standards, a member of the Audit Committee may not, other than in his or her capacity as a member of the board or any board committee (i) accept any consulting, advisory, or other compensation from us or (ii) be an affiliated person of the Bank. All members of the Audit Committee were determined to be independent under these criteria.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The following table sets forth the aggregate fees billed or to be billed for the years ended December 31, 2023 and 2022 by our independent registered public accounting firm, PricewaterhouseCoopers LLP ($ amounts in thousands).

	Years Ended December 31,	
	2023	**2022**
Audit fees	$ 945	$ 936
Audit-related fees	73	64
Tax fees	—	—
All other fees	2	1
Total fees	$ 1,020	$ 1,001

Audit fees were incurred for professional services rendered for the audits of our financial statements. Audit-related fees were incurred for certain FHLBank System assurance and related services, as well as fees related to PwC's participation at FHLBank conferences. All other fees for non-audit services were incurred for an annual license for PwC's disclosure software.

We are exempt from all federal, state, and local taxation, except employment and real estate taxes. Therefore, no fees were paid for tax services during the years presented.

Our Audit Committee has adopted an Independent Accountant Pre-approval Policy ("Pre-approval Policy"). In accordance with the Pre-approval Policy and applicable law, on an annual basis, the Audit Committee reviews the list of specific services and projected fees for services to be provided for the next 12 months by our independent registered public accounting firm and pre-approves audit services, audit-related services, tax services and non-audit services, as applicable. Pre-approvals are valid until the end of the next calendar year, unless the Audit Committee specifically provides otherwise.

Under the Pre-approval Policy, the Audit Committee may delegate pre-approval authority to one or more of its members subject to a pre-approval fee limit. The Audit Committee has designated the Committee Chair as the member to whom such authority is delegated. Pre-approved actions by the Committee Chair as designee are reported to the Audit Committee and ratified by the Audit Committee at its next scheduled meeting. New services that have not been pre-approved by the Audit Committee that are in excess of the pre-approval fee level established by the Audit Committee must be presented to the entire Audit Committee for pre-approval.

ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

The exhibits to this Annual Report on Form 10-K are listed below.

EXHIBIT INDEX

Exhibit Number	Description
3.1*	Organization Certificate of the Federal Home Loan Bank of Indianapolis, incorporated by reference to our Registration Statement on Form 10 (Commission File No. 000-51404) filed on February 14, 2006
3.2*	Bylaws of the Federal Home Loan Bank of Indianapolis, as amended effective July 22, 2022 incorporated by reference to Exhibit 3.1 of our Current Report on Form 8-K (Commission File No. 000-51404) filed on July 28, 2022
4.1*	Capital Plan of the Federal Home Loan Bank of Indianapolis, effective September 26, 2020, incorporated by reference to Exhibit 4.1 of our Current Report on Form 8-K (Commission File No. 000-51404) filed on August 17, 2020
4.2*	Description of the Bank's Capital Stock, incorporated by reference to Exhibit 4.2 of our Annual Report on Form 10-K (Commission File No. 000-51404) filed on March 10, 2022
10.1*+	Form of Key Employee Severance Agreement for Executive Officers, incorporated by reference to Exhibit 99.1 of our Current Report on Form 8-K (Commission File No. 000-51404) filed on November 20, 2007
10.2*	Federal Home Loan Banks Amended and Restated P&I Funding and Contingency Plan Agreement, incorporated by reference to Exhibit 10.3 of our Annual Report on Form 10-K (Commission File No. 000-51404) filed on March 10, 2017
10.3*	Joint Capital Enhancement Agreement dated August 5, 2011, incorporated by reference to Exhibit 99.1 of our Current Report on Form 8-K (Commission File No. 000-51404) filed on August 5, 2011
10.4*+	Supplemental Executive Retirement Plan, amended and restated effective as of June 1, 2003, incorporated by reference to Exhibit 10.3 of our Registration Statement on Form 10 (Commission File No. 000-51404) filed on February 14, 2006
10.5*+	2005 Supplemental Executive Retirement Plan, dated January 1, 2008, as amended and restated effective as of August 1, 2021 incorporated by reference to Exhibit 10.2 to our Quarterly Report on Form 10-Q (Commission File No. 000-51404) filed on November 10, 2021
10.6*+	2016 Supplemental Executive Thrift Plan, effective January 1, 2016, adopted on November 20, 2015, as amended and restated November 19, 2021, effective January 1, 2022, incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K (Commission File No. 000-51404) filed on December 22, 2021
10.7*+	Directors' Compensation and Expense Reimbursement Policy, effective January 1, 2024, incorporated by reference to Exhibit 10.1 of our Current Report on Form 8-K/A (Commission File No. 000-51404) filed on December 22, 2023
10.8+	Federal Home Loan Bank of Indianapolis 2016 Directors' Deferred Compensation Plan, as amended and restated as of January 1, 2021
10.9*+	Key Employee Severance Policy, re-adopted effective November 18, 2022, incorporated by reference to Exhibit 10.9 of our Annual Report on Form 10-K (Commission File No, 000-51404) filed on March 15, 2023
10.10+	Key Employee Severance Policy, re-adopted effective November 17, 2023

Exhibit Number	Description
10.11*+	Federal Home Loan Bank of Indianapolis Incentive Plan, as updated on January 26, 2021, effective January 1, 2021, incorporated by reference to Exhibit 10.1 of our Current Report on Form 8-K (Commission File No. 000-51404) filed on January 27, 2021
10.12*+	Federal Home Loan Bank of Indianapolis Incentive Plan, as amended and restated effective January 1, 2023, incorporated by reference to Exhibit 10.1 of our Current Report on Form 8-K (Commission File No. 000-51404) filed on June 6, 2023
10.13*+	Severance Pay Plan, re-adopted effective November 19, 2021, incorporated by reference to Exhibit 10.16 of our Annual Report on Form 10-K (Commission File No, 000-51404) filed on March 10, 2022
31.1	Certification of the President - Chief Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of the Executive Vice President - Chief Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.3	Certification of the Senior Vice President - Chief Accounting Officer pursuant to Section 302 of the Sarbanes - Oxley Act of 2002
32	Certification of the President - Chief Executive Officer, Executive Vice President - Chief Financial Officer, and Senior Vice President - Chief Accounting Officer 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

* These documents are incorporated by reference.

+ Management contract or compensatory plan or arrangement.

ITEM 16. FORM 10-K SUMMARY

None.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

FEDERAL HOME LOAN BANK OF INDIANAPOLIS

/s/ CINDY L. KONICH

Cindy L. Konich
President - Chief Executive Officer
(Principal Executive Officer)
Date: March 12, 2024

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 below:

Signature	Title	Date
/s/ CINDY L. KONICH **Cindy L. Konich** **(Principal Executive Officer)**	President - Chief Executive Officer	March 12, 2024
/s/ GREGORY L. TEARE **Gregory L. Teare** **(Principal Financial Officer)**	Executive Vice President - Chief Financial Officer	March 12, 2024
/s/ K. LOWELL SHORT, JR. **K. Lowell Short, Jr.** **(Principal Accounting Officer)**	Senior Vice President - Chief Accounting Officer	March 12, 2024
/s/ KAREN F. GREGERSON **Karen F. Gregerson**	Chair of the board of directors	March 12, 2024
/s/ ROBERT M. FISHER **Robert M. Fisher**	Vice Chair of the board of directors	March 12, 2024
/s/ MICHAEL E. BOSWAY **Michael E. Bosway**	Director	March 12, 2024
/s/ JACQUELINE L. BUCHANAN **Jacqueline L. Buchanan**	Director	March 12, 2024
/s/ CLIFFORD M. CLARKE **Clifford M. Clarke**	Director	March 12, 2024
/s/ KATHRYN M. DOMINGUEZ **Kathryn M. Dominguez**	Director	March 12, 2024
/s/ ANIKA GOSS-FOSTER **Anika Goss-Foster**	Director	March 12, 2024

Signature	**Title**	**Date**
/s/ CHARLOTTE C. HENRY **Charlotte C. Henry**	Director	March 12, 2024
/s/ PERRY G. HINES **Perry G. Hines**	Director	March 12, 2024
/s/ MARGARET M. LAMB **Margaret M. Lamb**	Director	March 12, 2024
/s/ LARRY W. MYERS **Larry W. Myers**	Director	March 12, 2024
/s/ TODD E. SEARS **Todd E. Sears**	Director	March 12, 2024
/s/ RYAN M. WARNER **Ryan M. Warner**	Director	March 12, 2024
/s/ GLENN A. WILSON **Glenn A. Wilson**	Director	March 12, 2024

Exhibit 10.8

FEDERAL HOME LOAN BANK OF INDIANAPOLIS

2016 DIRECTORS' DEFERRED COMPENSATION PLAN

(As Amended and Restated as of January 1, 2021)

Krieg DeVault LLP
One Indiana Square, Suite 2800
Indianapolis, IN 46204-2079
www.kriegdevault.com

ADOPTION OF
AMENDMENT AND RESTATEMENT OF THE
FEDERAL HOME LOAN BANK OF INDIANAPOLIS
2016 DIRECTORS' DEFERRED COMPENSATION PLAN

Pursuant to resolutions adopted by the Board of Directors of the Federal Home Loan Bank of Indianapolis, the undersigned officers of the Company hereby adopt the amendment and restatement of the Federal Home Loan Bank of Indianapolis 2016 Directors' Deferred Compensation Plan, amended and restated effective as of January 1, 2021, on behalf of the Company, in the form attached hereto.

Dated this 29th day of July, 2020.

FEDERAL HOME LOAN BANK OF INDIANAPOLIS

By:_ Dan L. Moore
Dan L. Moore

By:_ James L. Logue, III
James L. Logue, III

ATTEST:

By:_ Matthew R. St. Louis
Matthew R. St. Louis, Corporate Secretary

FEDERAL HOME LOAN BANK OF INDIANAPOLIS
2016 DIRECTORS' DEFERRED COMPENSATION PLAN

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ARTICLE I

INTRODUCTION

Section 1.1 Purpose. The purpose of the Federal Home Loan Bank of Indianapolis 2016 Directors' Deferred Compensation Plan (the "Plan") is to permit members of the Board of Directors (the "Board") of the Federal Home Loan Bank of Indianapolis (the "Bank") to elect to defer all or a portion of the fees payable to them for their services as Board members. It is the intention of the Bank that the Plan constitute a deferred compensation arrangement that complies with §409A of the Internal Revenue Code of 1986, as amended (the "Code"). Consequently, the Plan will be administered and its provisions interpreted consistently with that intention.

Section 1.2 Effective Date; Plan Year. The original effective date of the Plan was January 1, 2016. The "Effective Date" of this amendment and restatement of the Plan is January 1, 2021. The "Plan Year" is the 12-month period beginning on each January 1 and ending on the next following December 31.

Section 1.3 Administration. The Plan will be administered by an administrative committee (the "Committee") appointed by the Board, which will initially be the Human Resources Committee of the Board. The Committee, from time to time, may adopt any rules and procedures it deems necessary or desirable for the proper and efficient administration of the Plan that are consistent with the terms of the Plan. Any notice or document required to be given or filed with the Committee will be properly given or filed if delivered to or mailed, by registered mail, postage paid, to the Corporate Secretary of the Board of Directors, Federal Home Loan Bank of Indianapolis, 8250 Woodfield Crossing Boulevard, Suite 400, Indianapolis, Indiana 46240.

Section 1.4 Supplements. The provisions of the Plan may be modified by supplements to the Plan. The terms and provisions of each supplement are a part of the Plan and supersede any other provisions of the Plan to the extent necessary to eliminate any inconsistencies between the supplement and any other Plan provisions.

Section 1.5 Definitions. The following terms are defined in the Plan in the following Sections:

Term	Plan Section
Acceleration Event	4.7
Account	3.3
Bank	1.1
Board	1.1
Code	1.1
Director	2.1
Disabled	4.5(b)

Effective Date	1.2
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Investment Account	7.2
Participant	2.2
Participant Deferral Contribution	3.1
Plan	1.1
Plan Year	1.2
Separation from Service	4.1(c)
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Unforeseeable Emergency	3.2(e)

ARTICLE II

ELIGIBILITY AND PARTICIPATION

Section 2.1 Eligibility. Any duly elected and serving member of the Board ("Director") may become a "Participant" in the Plan as of the later of the Effective Date or the date the individual becomes a Director.

Section 2.2 Participation. A Director will become a Participant by making a deferral election pursuant to Article III. A Participant will cease to be an active Participant effective as of the date the Plan is terminated or the date the Director is no longer serving as a Director, so that he or she will not be entitled to make deferrals under Article III on or after that date. A Participant will continue as an inactive Participant until the entire benefit is distributed.

ARTICLE III

CONTRIBUTIONS AND ALLOCATIONS

Section 3.1 Participant Deferral Contributions. Subject to the terms and limitations of this Article III, a Participant may elect, pursuant to Section 3.2, to have all or a portion of his or her Fees payable in any Plan Year withheld by the Company and credited as a "Participant Deferral Contribution" under this Plan. The term "contribution" is used for ease of reference; however, credits are merely credits to each Participant's Account, which is a bookkeeping account. The term "Fees" for purposes of this Plan means all fees payable to the Participant for a Plan Year for the Participant's services as a Director.

Section 3.2 Deferral Elections. Participant Deferral Contributions will be withheld from a Participant's Fees in accordance with the following terms and conditions.

(a) Requirement for Deferral Elections. As a condition to the Bank's obligation to withhold and the Committee's obligation to credit Participant Deferral Contributions for the benefit of a Participant pursuant to Section 3.1, the Participant must complete and file a deferral election form with the Committee (in a format prescribed by the Committee).

(b) Timing of Execution and Delivery of Elections. To be effective to defer any portion of a Participant's Fees, a deferral election form must be filed with the Committee on or prior to the last day of the calendar year preceding the Plan Year in which the services giving rise to the Fees are performed. For example, to defer Fees payable with respect to services performed during the 2021 Plan Year, an election must be filed on or before December 31, 2020.

(c) Initial Eligibility. In the case of the first Plan Year in which an individual becomes a Director, the deferral election form may be filed at any time within 30 days of the date the individual becomes a Director (rather than the date specified under subsection (b)). This initial election will only apply to Fees paid for services performed after the filing of the deferral election form. This special initial eligibility election rule will not apply if the Participant is or has been a participant in a deferred compensation arrangement required to be aggregated with this Plan under the rules of Code §409A.

(d) Modification of Deferral Elections. Subject to the provisions of subsection (e), once made for a Plan Year, a deferral election will remain in effect for that Plan Year, unless and until the election is revoked or a new election filed. The revocation or new election must be filed in accordance with the requirements of subsection (b) above. No deferral election may be changed for Fees payable for a Plan Year after the last day of the election period described in subsection (b). For example, except as provided in subsections (e) and (f), any election in place for 2021 Fees may not be changed after December 31, 2020.

(e) Unforeseeable Emergency. The Committee, in its sole discretion, may cancel a Participant's election to defer Fees if the Committee determines the Participant has suffered an Unforeseeable Emergency. The cancellation will apply to the period after the Committee's determination. The Participant must submit a signed statement of the facts causing the severe financial hardship and any other information required by the Committee, in its sole discretion. "Unforeseeable Emergency" means a severe financial hardship of the Participant resulting from an illness or accident of the Participant, the Participant's spouse, the Participant's beneficiary, or the Participant's dependent (as defined in Code §152(a), without regard to Code §§152(b)(1), (b)(2) and (d)(1)(B)); loss of the Participant's property due to casualty (including the need to rebuild a home following damage to a home not otherwise covered by insurance, for example, not as a result of a natural disaster); imminent foreclosure of or eviction from the Participant's primary residence; the need to pay for medical expenses, including non-refundable deductibles, as well as for the costs of prescription drug medication; the need to pay for the funeral expenses of a spouse or a dependent (as defined in Code §152(a)) or other similar extraordinary and unforeseeable circumstances arising as a result of events beyond the control of the Participant.

(f) Disability. The Committee, in its sole discretion, may cancel a Participant's election to defer Fees if the Committee determines that the Participant has suffered a "disability," where such cancellation occurs by the later of the end of the taxable year of the Participant, or the 15^{th} day of the third month following the date the Participant incurs a "disability." For purposes of this subsection, a "disability" refers to any medically determinable physical or mental impairment resulting in the Participant's inability to perform the duties of his or her position or any substantially similar position, where such impairment can be expected to result in death or can be expected to last for a continuous period of not less than six months.

Section 3.3 Plan Account. The Committee will establish and maintain an "Account" on the Bank's records under the Plan for each Participant and will increase and decrease a Participant's Account as provided in Section 3.5.

Section 3.4 Investment Credits. A Participant's Account will be increased or decreased to reflect the increase or decrease in the value of the Investment Account established for the Participant pursuant to Section 7.2.

Section 3.5 Account Allocations. As of each accounting date, each Participant's Account will be:

(i) Increased by the amount credited to the Account under Section 3.1 since the last accounting;

(ii) Increased or decreased by the amount determined under Section 3.4 since the last accounting; and

(iii) Decreased by any payment made under Article IV.

The accounting date under this Section will be any date determined by the Committee. However, the accounting required under this Section must be made, at a minimum, as of the last day of each Plan Year quarter.

ARTICLE IV

BENEFIT PAYMENTS

Section 4.1 Time of Payment of Benefits. Except as provided in Section 4.5 through 4.7, a Participant will receive or will begin to receive payment of all or a portion of his or her Account balance (as determined under Article III) within 90 days following the date specified for payment or the commencement of payment effectively elected by the Participant, as provided in this Section. If no election is made or if the election is not timely or properly made, distribution will be made within 90 days of a Separation from Service.

(a) Timing of Execution and Delivery of Payment Election. A Participant may elect the date Participant Deferral Contributions for a Plan Year will be paid or will begin to be paid by completing and filing with the Committee an election form approved by the Committee. In lieu of specifying a date certain, a Participant may elect to have payment made or commenced within a specified period of time following the date the Participant experiences a "Separation from Service." To be effective, the election under this Section must be filed with the Committee no later than the later of the time the Participant makes a deferral election under the Plan for a Plan Year (or under any other plan required to be aggregated with the Plan pursuant to the requirements of Code Section 409A). For example, to make a payment election with respect to Participant Deferral Contributions for the 2021 Plan Year, an election must be filed on or before December 31, 2020.

(b) Initial Eligibility. In the case of the first Plan Year in which an individual becomes a Participant, the applicable payment election form may be filed with the Committee at any time within 30 days of the date the individual becomes a Participant (rather than the date specified under subsection 4.1(a)). This initial election will only apply to compensation for services performed after the filing of the payment election form. This special initial eligibility election rule will not apply if the Participant is or has been a participant in a deferred compensation arrangement required to be aggregated with this Plan under the rules of Section 409A.

(c) Change of Time of Payment. An election as to the date payment will be made or commenced may be changed by a Participant by filing a new payment election form with the Committee; provided, however, that: (i) the new election will not take effect until at least 12 months after the date the new election is filed; (ii) the single lump sum payment or the first payment of installment payments will be delayed for a period of not less than five years from the date the payment or first payment would otherwise have been made; and (iii) the new election is filed with the Committee at least 12 months prior to the date of the first scheduled payment under the Plan.

(d) Separation from Service. "Separation from Service" means the date on which the Participant ceases to be a Director for any reason.

Section 4.2 Method of Payment. Except as provided in Sections 4.5 through 4.7, the all or a portion of a Participant's Account will be distributed in cash in one of the following methods effectively elected by the Participant:

(a) A single lump sum payment;

(b) Annual installment payments over a period of two to five years; or

(c) A combination of the methods specified in subsections (a) and (b).

However, if the Participant Account is less than $10,000, then the entire Account will be paid in a single lump sum payment regardless of any Participant election to the contrary.

Section 4.3 Method of Payment Elections.

(a) Initial Election. A Participant may elect the method in which all or a portion of his or her Account balance will be paid to him or her under Section 4.2 in accordance with the terms and conditions of this Section. To make an election, a Participant must file an election with the Committee (in the manner prescribed by the Committee). To be effective, the Participant's election of a payment method must be filed with the Committee by the time the Participant makes a deferral election under the Plan for a Plan Year. If no election is made or if the election is not timely or properly made, distribution will be made in the form of a single lump sum payment.

(b) Change of Method of Payment. An election as to the manner of payment may not be changed after the payment has been made or payments have commenced. Prior to that time, a Participant may change his or her election by filing a new election form with the Committee; provided, however, that: (i) the new election will not take effect until at least 12 months after the date the new election is filed; (ii) the single lump sum payment or the commencement of installment payments with respect to which such election is made must be deferred for a period of not less than five years from the date such payment would otherwise have been made; and (iii) the new election is filed at least 12 months prior to the date of the first scheduled payment under the Plan.

(c) Installments. If installment distributions are elected, the initial annual installment amount will be the Account balance otherwise payable in a single sum multiplied by a fraction, the numerator of which is one and the denominator of which is the total number of installment distributions. Subsequent annual installments will also be a fraction of the unpaid Account balance, the numerator of which is always one but the denominator of which is the denominator used in calculating the previous installment minus one. For example, if five annual installment payments are elected, the initial installment will be one-fifth of the vested single sum Account balance, the second installment will be one-fourth of the remaining Account balance and the third installment will be one-third of the remaining Account balance, and so on.

Section 4.4 Vesting. A Participant will be fully "vested" in his or her Account balance at all times.

Section 4.5 Death or Disability of the Participant. In the event a Participant Separates from Service due to the Participant's Disability or if the Participant dies or becomes Disabled before he or she has received his or her entire Account balance, the unpaid balance will be paid to the Participant, or in the event of his or her death to his or her designated beneficiary or beneficiaries, in a single sum, within 90 days of the date of a determination by the Committee that the Participant is Disabled or within 90 days of the date of the Participant's death.

(a) Beneficiary Designations. A Participant may designate a beneficiary or beneficiaries to receive any amount payable under this Section as a result of his or her death. A Participant may change his or her designation of beneficiaries at any time by filing with the Committee a notice of the change in a manner approved by the Committee. Each beneficiary designation filed with the Committee will cancel all previously filed beneficiary designations. If no designation is in effect on the Participant's death, or if the designated beneficiary does not survive the Participant, his or her beneficiary will be his or her surviving spouse, if any, and then his or her estate.

(b) Disability. A Participant is "Disabled" for purposes of the Plan if the Participant is unable to engage in any substantial gainful activity by reason of any medically determinable physical or mental impairment which can be expected to result in death or can be expected to last for a continuous period of not less than 12 months. The Committee will be the sole and final judge of whether a Participant is Disabled for purposes of this Plan, after consideration of any evidence it may require, including the reports of any physician or physicians it may designate.

Section 4.6 Unforeseeable Emergency. In the event the Committee determines in its sole discretion that a Participant has experienced an Unforeseeable Emergency, as defined in subsection 3.2(e), all or a portion of a Participant's Account may be distributed in a single lump sum payment no later than 90 days after the Committee's determination. The Participant must submit a signed statement of the facts causing the severe financial hardship and any other information required by the Committee, in its sole discretion. Payment under this Section is subject to the following conditions:

(a) The emergency must not be able to be relieved through reimbursement or compensation from insurance or otherwise, by liquidation of the Participant's assets, to the extent liquidation of such assets would not cause severe financial hardship, or by cessation of deferrals under this Plan.

(b) The amount of the distribution must be limited to the amount reasonably necessary to satisfy the emergency need (which may include amounts necessary to pay any Federal, state, or local income taxes or penalties reasonably anticipated to result from the distribution) and must take into account any additional compensation available due to cancellation of a deferral election under subsection 3.2(e). However, the determination of amounts reasonably necessary to satisfy the emergency need is not required to take into account any additional compensation that due to the unforeseeable emergency is available under another nonqualified deferred compensation plan but has not actually been paid, or that is available due to the unforeseeable emergency under another plan that would provide for deferred compensation except due to the application of the effective date provisions of Treasury Regulation §1.409A-6. The payment may be made from any plan in which the Participant participates that provides for payment upon an Unforeseeable Emergency, provided that the plan under which the payment was made must be designated at the time of payment.

Section 4.7 Acceleration of Time of Payment. Except as provided in Section 4.6 or this Section, the time or schedule of payment of a Participant's Account provided in Sections 4.1 through 4.5 may not be accelerated. The time or schedule of payment of a Participant's Account may be accelerated in the following circumstances, each of which is an "Acceleration Event," to a time that is no later than 90 days following the Committee's determination that one of the Acceleration Events has occurred, and payment will be made in the form of a single lump sum:

(a) Domestic Relations Order. The time or schedule of a payment from a Participant's Account may be accelerated to make a payment to an individual other than the Participant as may be necessary to fulfill a domestic relations order (as defined in Code §414(p)(1)(B)).

(b) Conflicts of Interest. The time or schedule of a payment from a Participant's Account may be accelerated to the extent reasonably necessary to avoid the violation of an applicable Federal, state, local or foreign ethics law or conflicts of interest law (including where such payment is reasonably necessary to permit the service provider to participate in activities in the normal course of his or her position in which the service provider would otherwise not be able to participate under an applicable rule). A payment is reasonably necessary to avoid the violation of Federal, state, local or foreign ethics laws or conflicts of interest law if the payment is a necessary part of a course of action that results in compliance with a Federal, state, local or foreign ethics law or conflicts of interest law that would be violated absent such course of action, regardless of whether other actions would also result in compliance with the Federal, state, local or foreign ethics law or conflicts of interest law.

(c) Income Inclusion Under Code §409A. The time or schedule of a payment from a Participant's Account may be accelerated to pay the income tax, interest and penalties imposed if the Plan fails to meet the requirements of Code §409A and related regulations; provided, however, such payment will not exceed the amount required to be included in income as a result of the failure to comply with the requirements of Code §409A and related regulations.

(d) Plan Termination. The time or schedule of payment or commencement of payments from a Participant's Account may be accelerated when the Plan is terminated in accordance with one of the following:

(i) The Company terminates the Plan within 12 months of a corporate dissolution taxed under Code §331, or with the approval of a bankruptcy court pursuant to 11 U.S.C. §503(b)(1)(A), provided that the amounts deferred under the Plan are included in the Participants' gross incomes in the latest of the following years (or, if earlier, the taxable year in which the amount is constructively received).

(A) The calendar year in which the Plan termination and liquidation occurs;

(B) The first calendar year in which the amount is no longer subject to a substantial risk of forfeiture; or

(C) The first calendar year in which the payment is administratively practicable.

(ii) The Company's irrevocable action to terminate and liquidate the Plan within the 30 days preceding or the 12 months following a change in control as defined in Treasury Regulation §1.409A-3(i)(5). For purposes of this subsection (d), the Plan may be terminated only if all agreements, methods, programs, and other arrangements sponsored by the Employer immediately after the time of the change in control with respect to which deferrals of compensation are treated as having been deferred under a single plan under Treasury Regulation §1.409A-1(c)(2) are terminated and liquidated with respect to each Participant that experienced the change in control, so that under the terms of the termination and liquidation all such Participants are required to receive all amounts of compensation deferred under the Plan and other arrangements within 12 months of the date the Company irrevocably takes all necessary action to terminate and liquidate the Plan and other arrangements.

(iii) The Company's termination and liquidation of the Plan, provided that:

(A) The termination and liquidation does not occur proximate to a downturn in the financial health of the Company;

(B) The Company terminates and liquidates all agreements, programs, and other arrangements that would be aggregated under Treasury Regulation §1.409A-1(c) if the Participant had deferrals of compensation under all of the agreements, methods, programs, and other arrangements that are terminated and liquidated;

(C) No payments in liquidation of the Plan are made within 12 months of the date the Company takes all necessary action to irrevocably terminate and liquidate the plan other than payments that would be payable under the terms of the Plan if the action to terminate and liquidate the Plan had not occurred;

(D) All payments are made within 24 months of the date the Company takes all necessary action to irrevocably terminate and liquidate the Plan; and

(E) The Company does not adopt a new plan or arrangement that would be aggregated with any terminated and liquidated plan or arrangement under Treasury Regulation §1.409A-1(c) if the same Participant participated in both plans or arrangements, at any time within three years following the date the Company takes all necessary action to irrevocably terminate and liquidate the Plan.

(iv) Limited Cashouts. The Plan may terminate and liquidate a Participant's interest under the Plan up to the Code §402(g)(1)(B) limit prior to the times provided in Sections 4.1 and 4.2, provided that the Company comply with the requirements of Treasury Regulation §1.409A-3(j)(4)(v).

(v) Such other events and conditions as the Internal Revenue Service may prescribe in generally applicable guidance published in the Internal Revenue Bulletin.

ARTICLE V

PLAN ADMINISTRATION

Section 5.1 Appointment of the Committee.

The Committee, or a duly authorized officer or officers of the Bank empowered by the Committee to act on its behalf under subsection 5.2(e), will be responsible for administering the Plan, and the Committee will be charged with the full power and the responsibility for administering the Plan in all its details.

Section 5.2 Powers and Responsibilities of the Committee.

(i) Committee Powers. The Committee will have all powers necessary to administer the Plan, including the power to construe and interpret the Plan documents; to decide all questions relating to an individual's eligibility to participate in the Plan; to determine the amount, manner and timing of any distribution of benefits or withdrawal under the Plan; to resolve any claim for benefits in accordance with Article VI, and to appoint or employ advisors, including legal counsel, to render advice with respect to any of the Committee's responsibilities under the Plan. Any construction, interpretation, or application of the Plan by the Committee will be final, conclusive and binding.

(ii) Records and Reports. The Committee will be responsible for maintaining sufficient records to determine each Participant's eligibility to participate in the Plan, and for purposes of determining the amount of contributions that may be made on behalf of the Participant under the Plan.

(iii) Rules and Decisions. The Committee may adopt such rules as it deems necessary, desirable, or appropriate in the administration of the Plan. All rules and decisions of the Committee will be applied uniformly and consistently to all Participants in similar circumstances. When making a determination or calculation, the Committee will be entitled to rely upon information furnished by a Participant or beneficiary, the Bank or the legal counsel of the Bank.

(iv) Application for Benefits. The Committee may require a Participant or beneficiary to complete and file with it an application for a benefit, and to furnish all pertinent information requested by it. The Committee may rely upon all such information so furnished to it, including the Participant's or beneficiary's current mailing address.

(v) Delegation. The Committee may authorize one or more officers of the Bank to perform administrative responsibilities on its behalf under the Plan. Any such duly authorized officer will have all powers necessary to carry out the administrative duties delegated to such officer by the Committee.

Section 5.3 Liabilities. The individual members of the Committee will, in accordance with the Bank's by-laws, be indemnified and held harmless by the Bank with respect to any alleged breach of responsibilities performed or to be performed hereunder.

Section 5.4 Disclosure to Participant Upon Separation from Service. Within 90 days of a Participant's Separation from Service or a termination of the Plan, the Bank will provide the Participant a comprehensive statement setting forth the value of the Participant's benefit and the date and manner in which such benefit, plus earnings or minus losses, will be paid out to the Participant.

Section 5.5 Plan Expenses. The expenses incurred for the administration and maintenance of the Plan will be paid by the Bank.

ARTICLE VI

BENEFIT CLAIMS

While a Participant or beneficiary need not file a claim to receive his or her benefit under the Plan, if he or she wishes to do so, a claim must be made in writing and filed with the Committee. If a claim is denied, the Committee will furnish the claimant with written notice of its decision. A claimant may request a review of the denial of a claim for benefits by filing a written request with the Committee. The Committee will afford the claimant a full and fair review of such request.

ARTICLE VII

FUNDING AND TRANSFERS

Section 7.1 Unfunded Status. All contributions credited to a Participant's Account will be invested in an irrevocable "rabbi trust" (the "Trust") to provide for the benefits created by the Plan. The Trust will be maintained in such a fashion that the Plan at all times for purposes of ERISA and the Code will be unfunded and will constitute a mere promise by the Bank to make Plan benefit payments in the future. Any and all rights created under this Plan will be unsecured contractual rights against the Bank.

Section 7.2 Investments. Subject to the provisions of Section 7.1, the Bank will establish an investment account for each Participant under the Trust (the "Investment Account"). The Investment Account will, consequently, at all times remain an asset of the Bank and will be subject to the claims of the Banks' general creditors. A Participant may request that the Investment Account be allocated among available investment options established by the Committee or the Board from time to time under the Investment Account. The initial allocation request may be made at the time of enrollment. Investment allocation requests will remain effective until changed in accordance with procedures established by the Committee.

ARTICLE VIII

AMENDMENT AND TERMINATION OF THE PLAN

Section 8.1 Amendment of the Plan. The Bank may amend the Plan at any time in its sole discretion. Notwithstanding the foregoing, the Bank may not amend the Plan to reduce a Participant's Account balance as determined on the day preceding the effective date of the amendment or to otherwise retroactively impair or adversely affect the rights of a Participant or beneficiary.

Section 8.2 Termination of the Plan. The Bank may terminate the Plan at any time in its sole discretion. Absent an amendment to the contrary, Plan benefits that had accrued prior to the termination will be paid at the times and in the manner provided for by the Plan at the time of the termination.

ARTICLE IX

MISCELLANEOUS

Section 9.1 Governing Law. The Plan shall be construed, regulated and administered according to the laws of the State of Indiana, without reference to that state's choice of law principles, except in those areas preempted by the laws of the United States of America in which case the federal laws will control.

Section 9.2 Headings and Gender. The headings and subheadings in the Plan have been inserted for convenience of reference only and will not affect the construction of the Plan provisions. In any necessary construction, the masculine will include the feminine and the singular the plural, and vice versa.

Section 9.3 Spendthrift Clause. No benefit or interest available under the Plan will be subject in any manner to anticipation, alienation, sale, transfer, assignment, pledge, encumbrance, attachment or garnishment by creditors of a Participant or a Participant's beneficiary, either voluntarily or involuntarily.

Section 9.4 Counterparts. This Plan may be executed in any number of counterparts, each one constituting but one and the same instrument, and may be sufficiently evidenced by any one counterpart.

Section 9.5 No Enlargement of Employment Rights. Nothing contained in the Plan may be construed as a contract of employment between the Bank and any person, nor may the Plan be deemed to give any person the right to be retained as a director or limit the right of the Bank to dismiss a director.

Section 9.6 Limitations on Liability. Notwithstanding any other provision of the Plan, neither the Company nor any individual acting as an employee or agent of the Company will be liable to a Participant or any beneficiary for any claim, loss, liability or expense incurred in connection with the Plan, except when the same has been affirmatively determined by a court order or by the affirmative and binding determination of an arbitrator, to be due to the gross negligence or willful misconduct of that person.

Section 9.7 Incapacity of Participant or Beneficiary. If any person entitled to receive a distribution under the Plan is physically or mentally incapable of personally receiving and giving a valid receipt for any payment due (unless a prior claim for the distribution has been made by a duly qualified guardian or other legal representative), then, unless and until a claim for the distribution has been made by a duly appointed guardian or other legal representative of the person, the Committee may provide for the distribution to be made to any other individual or institution then contributing toward or providing for the care and maintenance of the person. Any payment made for the benefit of the person under this Section will be a payment for the account of such person and a complete discharge of any liability of the Bank under and the Plan.

Section 9.8 Evidence. Evidence required of anyone under the Plan may be by certificate, affidavit, document or other information which the person relying on the evidence considers pertinent and reliable, and signed, made or presented by the proper party or parties.

Section 9.9 Action by Bank. Any action required of or permitted by the Bank under the Plan will be by resolution of the Board, or by a person or persons authorized by resolution of the Board.

Section 9.10 Severability. In the event any provisions of the Plan are held to be illegal or invalid for any reason, the illegality or invalidity will not affect the remaining parts of the Plan, and the Plan will be construed and endorsed as if the illegal or invalid provisions had never been contained in the Plan.

Section 9.11 Information to be Furnished by a Participant. A Participant, or any other person entitled to benefits under the Plan, must furnish the Committee with any and all documents, evidence, data or other information the Committee considers necessary or desirable for the purpose of administering the Plan. Benefit payments under the Plan are conditioned on a Participant (or other person who is entitled to benefits) furnishing full, true and complete data, evidence or other information to the Committee, and on the prompt execution of any document reasonably related to the administration of the Plan requested by the Committee.

Section 9.12 Attorneys' Fees. If any action is commenced to enforce the provisions of the Plan, attorneys' fees will be paid by the Bank.

Section 9.13 Binding on Successors. The Plan will be binding upon and inure to the benefit of the Bank and its successors and assigns, and the successors, assigns, designees and estates of a Participant. The Plan will also be binding upon and inure to the benefit of any successor organization succeeding to substantially all of the assets and business of the Bank, but nothing in the Plan will preclude the Bank from merging or consolidating into or with, or transferring all or substantially all of its assets to, another organization which assumes the Plan and all obligations of the Bank hereunder. The Bank agrees that it will make appropriate provision for the preservation of a Participant's rights under the Plan in any agreement or plan which it may enter into to effect any merger, consolidation, reorganization or transfer of assets. Upon such a merger, consolidation, reorganization, or transfer of assets and assumption of Plan obligations of the Bank, the term "Bank" will refer to such other organization and the Plan will continue in full force and effect.

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Exhibit 10.10

Board Approved 11-17-2023

KEY EMPLOYEE SEVERANCE POLICY

1. Purpose of Policy. The Federal Home Loan Bank of Indianapolis recognizes the valuable services that Covered Employees (as defined below) will provide and desires to be assured that the Covered Employees will continue their active participation in the business of the Bank. The Covered Employees desire assurance that, in the event of any consolidation, change in control or reorganization of the Bank, they will continue to have the responsibility and status each has earned, either with the Bank or with a successor to the Bank.

2. Definitions.

"Bank" shall mean the Federal Home Loan Bank of Indianapolis and any other entity within the definition of "Bank" in Section 7(a).

"Cause" shall mean (a) the continued failure of the Covered Employee to perform his duties with the Bank (other than any such failure resulting from Disability), after a demand for performance, pursuant to a resolution of the Bank's Board of Directors, is delivered to the Covered Employee by the Chair of the Board of Directors of the Bank, which specifically identifies the manner in which the Covered Employee has not performed his duties, (b) the personal dishonesty, incompetence, willful misconduct, breach of fiduciary duty involving personal profit, intentional failure to perform stated duties, or willful violation of any law, rule or regulation (other than routine traffic violations or similar offenses); or (c) the removal of the Covered Employee by the Bank at the direction of the Federal Housing Finance Agency, or by the Federal Housing Finance Agency, or by or at the direction of any successor to the Federal Housing Finance Agency, pursuant to 12 U.S.C. §§ 4615, 4616, 4617 or 4636a, or any statutory provisions subsequently enacted that grant removal authority to such agency, or any rules or regulations issued thereunder.

"Compensated Termination" shall have the meaning set forth in Section 3(a).

"Covered Employees" shall mean each of the Bank's Executive Vice Presidents and Senior Vice Presidents, including without limitation the Bank's Chief Internal Audit Officer and Chief Risk Officer, and such other employees as designated from time to time by the Human Resources Committee of the Board of Directors. This Policy does not apply to the Bank's President-Chief Executive Officer. Covered Employees shall be allocated into three (3) groups, Level 1 Participants, Level 2 Participants, and Level 3 Participants, each as described below.

"Disability" shall mean, as a result of the Covered Employee's incapacity due to physical or mental illness, the Covered Employee shall have been absent from his duties with the Bank for an aggregate of twelve (12) out of fifteen (15) consecutive months and, within thirty (30) days after a Notice of Termination is thereafter given by the Bank to the Covered Employee, the Covered Employee shall not have returned to the full-time performance of the Covered Employee's duties.

"Good Reason" shall mean any of the following:

(a) during the period (i) beginning with the earliest to occur of the following three dates, as applicable: (A) six (6) months prior to the execution of a definitive agreement regarding a Reorganization of the Bank or (B) if a Reorganization has been mandated by federal statute, rule, regulation or directive, six (6) months prior to the effective date of such Reorganization or (C) six (6) months prior to the adoption of a plan or proposal for the liquidation or dissolution of the Bank, and (ii) ending twenty-four (24) months after the effective date of such Reorganization,

(i) a material change in the Covered Employee's status, position, job title or principal duties and responsibilities as a key employee of the Bank which does not represent a promotion from the Covered Employee's status and position as in effect as of the date hereof ("Position"), or

(ii) the assignment to the Covered Employee of any duties or responsibilities (or removal of any duties or responsibilities), which assignment or removal is materially inconsistent with such Position, or

(iii) any removal of the Covered Employee from such Position (including, without limitation, all demotions and harassing assignments), except in connection with the termination of the Covered Employee's employment for Cause or Disability, or as a result of the Covered Employee's death;

(b) within twenty-four (24) months after the effective date of a Reorganization of the Bank, (i) a reduction by the Bank in the Covered Employee's base salary as in effect immediately prior to such Reorganization, or (ii) the Bank's (or its successor's) failure to increase (within twelve (12) months of the Covered Employee's last increase in base salary) the Covered Employee's base salary after a Reorganization of the Bank in an amount which is not less than fifty percent (50%) of the average percentage increase in base salary for all officers of the Bank effected in the preceding twelve (12) months;

(c) within twenty-four (24) months after the effective date of a Reorganization of the Bank, (i) any failure by the Bank to continue in effect any plan or arrangement, including, without limitation, benefit and incentive plans, in which the Covered Employee is participating immediately prior to such Reorganization (hereinafter referred to as "Plans"), unless such Plans have been replaced with similar benefits that are not materially less than the Covered Employee's benefits under such Plans, or (ii) the taking of any action by the Bank which would adversely affect the Covered Employee's participation in or materially reduce the Covered Employee's benefits under any such Plan or in or under fringe benefits enjoyed by the Covered Employee immediately prior to the time of such Reorganization of the Bank;

(d) any material breach by the Bank of any provisions of this Policy or any other agreement with the Covered Employee; or

(e) any failure by the Bank or its successors and assigns to obtain the assumption of this Policy by any successor or assign of the Bank.

"Level 1 Participant" shall mean each of the Bank's Executive Vice Presidents.

"Level 2 Participant" shall mean each of the Bank's Senior Vice Presidents.

"Level 3 Participant" shall mean each other officer of the Bank, other than an Executive Vice President or a Senior Vice President, whom the Human Resources Committee designates to be a Level 3 Participant from time to time.

"Notice of Termination" shall mean a written notice which shall indicate those specific termination provisions in this Policy upon which the Bank or the Covered Employee, as the case may be, has relied for such termination and which sets forth in reasonable detail the facts and circumstances claimed to provide a basis for termination of the Covered Employee's employment under the provision so indicated.

"Payment Determination Date" shall have the meaning set forth in Section 3(b).

"Reorganization" of the Bank shall mean the occurrence at any time of any of the following events:

(a) The Bank is merged or consolidated with or reorganized into or with another bank or other entity, or another bank or other entity is merged or consolidated into the Bank;

(b) The Bank sells or transfers all, or substantially all of its business and/or assets to another bank or other entity;

(c) More than fifty percent (50%) of the total market value or total voting power of all ownership interests in the Bank is acquired, within any twelve (12) month period, by one person or entity or by more than one person or entity acting as a group; or

(d) The liquidation or dissolution of the Bank.

Provided that the term "Reorganization" shall not include any Reorganization that is mandated by federal statute, rule, regulation, or directive, including 12 U.S.C. § 1421, *et seq*., as amended, and 12 U.S.C. § 4501 *et seq*., as amended, and which the Director of the Federal Housing Finance Agency (or successor agency) has determined should not be a basis for making payment under this Policy, by reason of the capital condition of the Bank or because of unsafe or unsound acts, practices, or condition ascertained in the course of the Agency's supervision of the Bank or because any of the conditions identified in 12 U.S.C. § 4617(a)(3) are met with respect to the Bank (which conditions do not result solely from the mandated reorganization itself, or from action that the Agency has required the Bank to take under 12 U.S.C. § 1431(d)).

"Retirement" shall mean the planned and voluntary termination by the Covered Employee of his or her employment on or after reaching the earliest retirement age permitted by the Bank's qualified retirement plans.

3. Compensated Termination.

(a) Compensated Termination. If the Covered Employee incurs a Compensated Termination while the Covered Employee is employed by the Bank or within twenty-four (24) months after the effective date of a Reorganization of the Bank (whether the Covered Employee is then employed by the Bank or a successor to the Bank as a result of such Reorganization), the Covered Employee shall be entitled to the benefits provided in Section 5. For purposes of this Policy, a "Compensated Termination" means termination of the Covered Employee's employment under either of the following circumstances:

(i) By the Covered Employee for Good Reason; or

(ii) By the Bank, or by its successor in a Reorganization, without Cause at any time during the period (1) beginning with the earliest to occur of the following three dates, as applicable (A) six (6) months prior to the execution of a definitive agreement regarding a Reorganization, or (B) if a Reorganization has been mandated by federal statute, rule, regulation or directive, six (6) months prior to the effective date of such Reorganization, or (C) six (6) months prior to the adoption of a plan or proposal for the liquidation or dissolution of the Bank, and (2) ending twenty-four (24) months after the effective date of such Reorganization.

(b) Payment Determination Date. "Payment Determination Date," for purposes of determining when a payment resulting from a Compensated Termination must be made pursuant to Section 4(a), shall mean the effective date of the termination of the Covered Employee's employment with the Bank if such termination is a "Compensated Termination."

(c) Non-Compensated Termination. For the avoidance of doubt, none of the following events shall result in any payment to the Covered Employee for a Compensated Termination under Section 5(a):

(i) The termination of employment by the Covered Employee without Good Reason;

(ii) The termination of the Covered Employee's employment for Cause by the Bank or its successor in a Reorganization;

(iii) The termination of the Covered Employee's employment Without Cause by the Bank or its successor in a Reorganization, (1) prior to the date which is the earliest to occur of the following three dates, as applicable: (A) six (6) months prior to the execution of a definitive agreement regarding a Reorganization of the Bank or (B) if a Reorganization has been mandated by federal statute, rule, regulation or directive, six (6) months prior to the effective date of such Reorganization or (C) six (6) months prior to the adoption of a plan or proposal for the liquidation or dissolution of the Bank, or (2) more than twenty-four (24) months after the effective date of a Reorganization;

(iv) The termination of the Covered Employee's employment by the Bank or its successor in a Reorganization for Disability;

(v) The death of the Covered Employee; or

(vi) The Retirement of the Covered Employee, if the Covered Employee has delivered written notice to the Bank, before the commencement of the time period described in Section 3(c)(iii), of his or her intention to retire.

4. Termination of Employment.

(a) Termination by the Bank. The Bank may terminate the employment of the Covered Employee as follows:

(i) For Cause upon the adoption of a resolution by the affirmative vote of not less than a majority of the entire membership of the Bank's Board of Directors at a meeting of the Board (after reasonable notice to the Covered Employee and an opportunity for the Covered Employee, together with counsel, to be heard by the Board), finding that in the good faith opinion of the Board the Covered Employee was guilty of conduct set forth in the definition of "Cause" in Section 2 and specifying the particulars thereof in detail. A vote of the Board is not required if the Covered Employee is removed for cause by the Bank at the direction of the Federal Housing Finance Agency, or by the Federal Housing Finance Agency, or by or at the direction of any successor to the Federal Housing Finance Agency, pursuant to 12 U.S.C. §§ 4615, 4616, 4617 or 4636a, or any statutory provisions subsequently enacted that grant removal authority to such agency, or any rules or regulations issued thereunder.;

(ii) Without Cause;

(iii) Upon the Disability of the Covered Employee; and

(iv) Upon the death of the Covered Employee.

(b) Termination by Covered Employee. The Covered Employee may terminate his or her employment with the Bank as follows:

(i) For Good Reason;

(ii) Without Good Reason; or

(iii) Upon the Covered Employee's Retirement, in which case the Covered Employee shall be entitled to all benefits under any retirement plan of the Bank and other plans to which the Covered Employee is a party.

(c) Preservation of Compensated Termination. The provisions of Sections 4(a) and 4(b) are included in this Policy for clarification of the rights of termination of the employment relationship between the Bank and the Covered Employee, but such provisions shall not prejudice the Covered Employee's right to receive payments or benefits required to be provided to the Covered Employee if any such termination is a "Compensated Termination."

(d) Notice of Termination.

(i) Any termination by the Bank for Disability or Cause shall be communicated by a Notice of Termination; provided, however, that the failure by the Bank to give notice in such circumstances shall not constitute a Compensated Termination.

(ii) Any termination of employment by the Covered Employee for Good Reason will be a Compensated Termination only if the Covered Employee gives Notice of Termination to the Bank therefore within ninety (90) days of the event or occurrence which constitutes "Good Reason," provided, further, that, if the Covered Employee gives such Notice of Termination to the Bank in a timely manner, the Covered Employee shall not be deemed to have waived any of his or her rights hereunder in the event he or she remains in the employment of the Bank while he or she and the Bank engage in good faith discussions to resolve any event or occurrence which constitutes "Good Reason." The Bank has a thirty (30) day period following receipt of notice during which it may remedy the condition and not be required to pay the amount.

(iii) Any termination by the Bank without Cause or by the Covered Employee without Good Reason shall be communicated to the other party in accordance with the general notice provisions of this Policy.

5. Payment for Compensated Termination.

(a) In the event of a Compensated Termination, the Bank shall pay or provide the Covered Employee with an amount equal to the following:

(i) With respect to Level 1 Participants, two (2) times the average of the three (3) preceding calendar years' gross base salary (inclusive of amounts deferred under a qualified or nonqualified plan sponsored by the Bank) and gross bonuses (inclusive of any amounts deferred under a qualified or nonqualified plan sponsored by the Bank) paid to the Covered Employee during such years (provided that for any calendar year in which the Covered Employee received base salary for less than the entire calendar year, the gross amount shall be annualized as if such amount had been payable for the entire calendar year).

(ii) With respect to Level 2 Participants, one and one-half (1.5) times the average of the three (3) preceding calendar years' gross base salary (inclusive of amounts deferred under a qualified or nonqualified plan sponsored by the Bank) and gross bonuses (inclusive of any amounts deferred under a qualified or nonqualified plan sponsored by the Bank) paid to the Covered Employee during such years (provided that for any calendar year in which the Covered Employee received base salary for less than the entire calendar year, the gross amount shall be annualized as if such amount had been payable for the entire calendar year).

(iii) With respect to Level 3 Participants, one (1) times the average of the three (3) preceding calendar years' gross base salary (inclusive of amounts deferred under a qualified or nonqualified plan sponsored by the Bank) and gross bonuses (inclusive of any amounts deferred under a qualified or nonqualified plan sponsored by the Bank) paid to the Covered Employee during such years (provided that for any calendar year in which the Covered Employee received base salary for less than the entire calendar year, the gross amount shall be annualized as if such amount had been payable for the entire calendar year).

The Bank shall distribute such amount in a lump sum in cash within twenty (20) days of the Payment Determination Date.

(b) Notwithstanding Section 5(a), if the Bank is not in compliance with any applicable regulatory capital or regulatory leverage requirement or if the payment would cause the Bank to fall below applicable regulatory requirements, such payment shall be deferred until such time as the Bank achieves compliance with its regulatory requirement.

(c) To the extent the Covered Employee is eligible, he or she shall continue after a Compensated Termination to be covered by the Bank's medical and dental insurance plans in effect immediately prior to the Compensated Termination, subject to the Covered Employee's payment of the employee's portion of the cost of such coverage. This continuing medical and dental insurance shall continue for Level 1 Participants for twenty-four (24) months, for Level 2 Participants for eighteen (18) months, and for Level 3 Participants for twelve (12) months. In the event the Covered Employee is ineligible under the terms of such plans to continue to be so covered or such plans shall have been modified, the Bank shall provide through other sources coverage which is substantially equivalent to the coverage provided immediately prior to the Compensated Termination, subject to the Covered Employee's payment of a comparable portion of the cost of such coverage as under the Bank's medical and dental insurance plans. If during this time period the Covered Employee should enter into employment providing for comparable medical and dental insurance coverage, his or her participation in the medical and dental plans provided by the Bank shall cease.

(d) The Bank will provide outplacement services for the Covered Employee after a Compensated Termination, at the Bank's cost.

(e) The Covered Employee shall be responsible for the payment of all federal, state and local income taxes which may be due with respect to any payments made to the Covered Employee pursuant to this Policy.

(f) If the severance and other benefits provided for in this Agreement or otherwise payable to the Covered Employee (i) constitute "parachute payments" within the meaning of Section 280G of the Internal Revenue Code of 1986, as amended (the "Code") and (ii) but for this provision, would be subject to the excise tax imposed by Section 4999 of the Code, then such severance and other benefits shall be collectively subject to an overall maximum limit. The payment limit shall be one dollar ($1) less than the aggregate amount which would otherwise cause any such payments to be considered a "parachute payment" within the meaning of Section 280G of the Code. Unless the Bank and the Covered Employee otherwise agree in writing, any determination required under this provision shall be made in writing by the Bank's independent public accountants (the "Accountants"), whose determination shall be conclusive and binding upon the Covered Employee and the Bank for all purposes. For purposes of making the calculations required by this provision, the Accountants may make reasonable assumptions and approximations concerning applicable taxes and may rely on reasonable, good faith interpretations concerning the application of Sections 280G and 4999 of the Code. The Bank and the Covered Employee shall furnish to the Accountants such information and documents as the Accountants may reasonably request in order to make a determination under this provision. The Bank shall bear all costs the Accountants may reasonably incur in connection with any calculations contemplated by this provision. Accordingly, to the extent that such severance and other benefits would be considered a "parachute payment," or are "deferred compensation" within the meaning of Section 409A of the Code, the severance and other benefits will be reduced pro rata until the remaining severance and other benefits shall be reduced or eliminated in the following order until the remaining severance and other benefits payable hereunder are collectively within the maximum described in this Subsection:

(i) first, any cash payments to the Covered Employee;

(ii) second, any change of control termination payments to the Covered Employee not described herein; and

(iii) third, any forgiveness of indebtedness of the Covered Employee to the Bank.

Each Covered Employee expressly and irrevocably waives any and all rights to receive any severance and other payments which exceed the maximum limit described in this Subsection.

6. <u>No Obligation to Seek Further Employment; No Effect on Other Contractual Rights</u>.

(a) The Covered Employee shall not be required to seek other employment, nor shall any payment made under this Policy be reduced by any compensation received from other employment.

(b) The provisions of this Policy, and any payment provided for hereunder, shall not reduce any amounts otherwise payable, or in any way diminish the Covered Employee's existing rights, or rights which would accrue solely as a result of the passage of time, under any Plan, except to the extent set forth in Section 6(c).

(c) The following rules clarify the interaction of this Policy with the Bank's Severance Pay Plan ("SPP").

(i) If a Covered Employee becomes eligible to receive benefits under this Policy (*e.g.*, if the Covered Employee experiences a Compensated Termination), the Covered Employee shall be entitled to receive benefits under this Policy and not under the SPP, regardless of whether the Covered Employee would otherwise be eligible for benefits under the SPP.

(ii) If a Covered Employee becomes eligible for benefits under the SPP, but does not become eligible to receive benefits under this Policy, the Covered Employee shall be entitled to receive benefits under the SPP.

(iii) Notwithstanding subsection 6(c)(ii), if (A) a Covered Employee receives benefits under the SPP, and (B) the Covered Employee subsequently becomes eligible to receive benefits under this Policy, then the Covered Employee shall be entitled to receive the benefits contemplated by this Policy, but the total benefits received by the Covered Employee on account of both the SPP and this Policy may not exceed those contemplated by this Policy alone. Therefore, if the Covered Employee is entitled to receive any benefits under this Policy, such benefits shall be automatically reduced by the amount of benefits the Covered Employee received pursuant to the SPP.

7. Successor to the Bank.

(a) This Policy is binding upon the successors and assigns of the Bank. The Bank and its successors and assigns will require any successor or assign (whether direct or indirect, in a Reorganization, by operation of law, or otherwise) to all or substantially all of the business and/or assets of the Bank, to enter into a written agreement in form and substance satisfactory to the Covered Employee. In the written agreement, the successor and its assigns will expressly, absolutely and unconditionally assume and agree to perform this Policy in the same manner and to the same extent that the Bank would be required to perform it if no such succession or assignment had taken place. In such event, the Bank agrees that it shall pay or shall cause such employer to pay any amounts owed to the Covered Employee pursuant to Section 5.

As used in this Policy, "Bank" shall mean the Bank as hereinbefore defined and any successor or assign to its business and/or assets as aforesaid which executes and delivers the agreement provided for in this Section or which otherwise becomes bound by all the terms and provisions of this Policy by operation of law. If at any time during the term of this Policy the Covered Employee is employed by any corporation a majority of the voting securities of which is then owned by the Bank, the term "Bank" shall include such employer. Whether or not another entity becomes the successor or assign of the Bank under this Policy, the maximum amount which the Covered Employee may receive from all sources under this Policy in a Compensated Termination shall be the amounts set forth in Section 5.

(b) This Policy shall inure to the benefit of and be enforceable by the Covered Employee's personal and legal representatives, executors, administrators, successors, heirs, distributees, and legatees. If the Covered Employee should die while any amounts are still payable to him hereunder, all such amounts, unless otherwise provided herein, shall be paid in accordance with the terms of this Policy to the beneficiary designated by notice in writing executed by the Covered Employee and filed with the Bank, or failing such designation, to the Covered Employee's estate.

8. Late Payment of Benefits. Any payment made later than the time provided for in Section 5(a) for whatever reason, including, without limitation, the reasons set forth in Section 5(b), shall include interest at the Bank's cost of funds plus five percent (5%), which shall begin to accrue on the tenth (10th) day following the Covered Employee's Payment Determination Date.

9. **Employment Rights.** This Policy shall not confer upon the Covered Employee any right to continue in the employ of the Bank and shall not in any way affect the right of the Bank to dismiss or otherwise terminate the Covered Employee's employment at any time and for any reason with or without cause. This Policy is not intended (a) to be an employment agreement or (b) to define all aspects of the employment relationship between the Bank and the Covered Employee including, but not limited to applicable employment or benefit policies of the Bank. To the extent there is any conflict between the terms hereof and the terms of any employment or benefit policies of the Bank, the terms of this Policy shall control. Any payments or benefits to which the Covered Employee may be entitled under Section 5 will not constitute wages for work performed by the Covered Employee.

10. **Tax Withholding.** The Bank will withhold from any amounts payable to Covered Employee under this Policy to satisfy all applicable federal, state, local or other withholding taxes. All amounts payable under Section 5(a) are considered "wages" to be reported on Form W-2. The normal withholding rules for wages apply. The Bank will also withhold any excise taxes owed under Code Section 4999.

11. **Notice.** For purposes of this Policy, notices and all other communications provided for in the Policy shall be in writing and shall be deemed to have been duly given when delivered by hand, delivered by a nationally-recognized overnight courier service, or mailed by United States registered mail, return receipt requested, postage prepaid, as follows:

If to the Bank:

Federal Home Loan Bank of Indianapolis
8250 Woodfield Crossing Boulevard
Indianapolis, Indiana 46240
Attention: Chairman of the Board of Directors
With a copy to the President

If to the Covered Employee:

At the address on file with the Bank's Human Resources department

or such other address as either party may have furnished to the other in writing in accordance herewith. Any notice shall be effective upon receipt.

12. **Legal Fees and Expenses.** The Bank shall pay all reasonable legal fees and expenses which the Covered Employee may incur as a result of the Bank's contesting the validity or enforceability of this Policy or the calculation of amounts payable hereunder so long as the Covered Employee is wholly or partially successful on the merits or the parties agree to a settlement of the dispute.

13. **Term**. This Policy is effective upon its approval by the Board of Directors. The Human Resources Committee will review this Policy, recommend any changes, and recommend Board approval at least once per calendar year. If the Human Resources Committee does not act to approve, amend, or terminate this Policy in a calendar year, this Policy shall automatically renew for an additional 3 year period.

14. Arbitration.

(a) Disputes regarding this Policy are subject to the Federal Home Loan Bank of Indianapolis Agreement to Arbitrate by and between the Bank and the Covered Employee ("Arbitration Agreement"). No cancellation, replacement or modification to the arbitration procedures under the Arbitration Agreement shall be effective unless agreed to in writing by both the Bank and the Covered Employee. In the event of any conflict between the provisions of this Policy and the Arbitration Agreement, the provisions of this Policy shall control.

(b) If within thirty (30) days after any Notice of Termination is given, the party receiving such Notice of Termination notifies the other party that a dispute exists concerning the Termination, the parties shall promptly proceed to arbitration as provided in Section 14(a). Notwithstanding the pendency of any such dispute, the Bank shall continue to pay the Covered Employee his or her base salary and provide such other compensation and benefits, all as in effect immediately prior to the Notice of Termination. If it is determined that the Covered Employee is not entitled to any compensation under Section 5, the Covered Employee shall return all cash amounts to the Bank promptly following the date of resolution by arbitration, with interest thereon commencing as of the date of the resolution of the dispute by arbitration at the prime rate of interest as published by the *Wall Street Journal* from time to time. Any cash amounts paid to the Covered Employee pending the resolution of the dispute by arbitration shall offset any amounts determined to be due to the Covered Employee under Section 5.

15. Miscellaneous.

(a) No Waiver. No waiver by either party hereto at any time of any breach by the other party hereto of, or compliance with, any condition or provision of this Policy to be performed by such other party shall be deemed a waiver of similar or dissimilar provisions or conditions at the same or at any prior or subsequent time.

(b) Entire Policy. No agreements or representations, oral or otherwise, express or implied, with respect to the subject matter hereof have been made by either party which are not set forth expressly in this Policy.

(c) Governing Law. This Policy shall be governed by and construed in accordance with the laws of the State of Indiana (excluding conflicts of laws principles), except to the extent such law is preempted by the laws of the United States.

(d) Headings. Section or paragraph headings contained herein are for convenience of reference only and are not to be considered a part of this Policy.

(e) Validity. The invalidity or unenforceability of any provisions of this Policy shall not affect the validity or enforceability of any other provision of this Policy, which shall remain in full force and effect.

(f) Rescission of Prior Agreements. This Policy shall rescind and be in full replacement of any prior "Key Employee Severance Agreement" entered into between the Covered Employee and the Bank.

(g) Administration. This Policy shall be administered by the Chief HR & Diversity, Equity and Inclusion Officer. Interpretations and decisions by the Bank's Chief HR & Diversity, Equity and Inclusion Officer regarding the application of this Policy, made in the Bank's sole discretion, shall be final, provided the interpretations and decisions are consistent with the Bank's authority under applicable federal and state law.

(h) No Discrimination. This Policy will be applied on a non-discriminatory basis without regard to race, color, religion, national origin, sex, age, sexual orientation, handicap, gender identity, genetic information, veteran's status, parental status, pregnancy status, citizenship status, or mental or physical disability, and without regard to whether the employee has made charges, testified, assisted or participated in enforcement proceedings based on an otherwise unlawful employment practice, in accordance with federal law.

Exhibit 31.1

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

I, Cindy L. Konich, certify that:

1. I have reviewed this annual report on Form 10-K of the Federal Home Loan Bank of Indianapolis;

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: March 12, 2024

By: /s/ CINDY L. KONICH

Name: Cindy L. Konich

Title: President - Chief Executive Officer

Exhibit 31.2

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

I, Gregory L. Teare, certify that:

1. I have reviewed this annual report on Form 10-K of the Federal Home Loan Bank of Indianapolis;

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: March 12, 2024

By: /s/ GREGORY L. TEARE

Name: Gregory L. Teare

Title: Executive Vice President - Chief Financial Officer

Exhibit 31.3

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

I, K. Lowell Short, Jr., certify that:

1. I have reviewed this annual report on Form 10-K of the Federal Home Loan Bank of Indianapolis;

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: March 12, 2024

By: /s/ K. LOWELL SHORT, JR.

Name: K. Lowell Short, Jr.

Title: Senior Vice President - Chief Accounting Officer

Exhibit 32

SECTION 1350 CERTIFICATIONS

In connection with the annual report of the Federal Home Loan Bank of Indianapolis ("Bank") on Form 10-K for the period ended December 31, 2023, as filed with the Securities and Exchange Commission on the date hereof ("Report"), each of the undersigned officers certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 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 Bank.

By: /s/ CINDY L. KONICH
Cindy L. Konich
President - Chief Executive Officer
March 12, 2024

By: /s/ GREGORY L. TEARE
Gregory L. Teare
Executive Vice President - Chief Financial Officer
March 12, 2024

By: /s/ K. LOWELL SHORT, JR.
K. Lowell Short, Jr.
Senior Vice President - Chief Accounting Officer
March 12, 2024