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

FORM 10-K

(Mark One)

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

For the fiscal year ended December 31, 2021

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

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, 2021, the aggregate par value of the Class B stock held by members and former members of the registrant was approximately $2.5 billion. At February 28, 2022, including mandatorily redeemable capital stock, we had zero outstanding shares of Class A stock and 21,339,442 outstanding shares of Class B stock.

DOCUMENTS INCORPORATED BY REFERENCE: None.

Table of Contents

		Page Number
	Defined Terms	3
	Special Note Regarding Forward-Looking Statements	5
ITEM 1.	BUSINESS	6
	Operating Segments	7
	Funding Sources	13
	Affordable Housing Programs, Community Investment and Small Business Grants	14
	Use of Derivatives	15
	Supervision and Regulation	15
	Membership	17
	Competition	17
	Human Capital Resources	18
	Available Information	19
ITEM 1A.	RISK FACTORS	20
ITEM 1B.	UNRESOLVED STAFF COMMENTS	30
ITEM 2.	PROPERTIES	30
ITEM 3.	LEGAL PROCEEDINGS	30
ITEM 4.	MINE SAFETY DISCLOSURES	30
ITEM 5.	MARKET FOR REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES	31
ITEM 6.	RESERVED	32
ITEM 7.	MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS	32
	Executive Summary	32
	Results of Operations and Changes in Financial Condition	34
	Operating Segments	43
	Analysis of Financial Condition	44
	Liquidity and Capital Resources	54
	Critical Accounting Estimates	59
	Recent Accounting and Regulatory Developments	61
	Risk Management	64
ITEM 7A.	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	76
ITEM 8.	FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA	84
ITEM 9.	CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE	141
ITEM 9A.	CONTROLS AND PROCEDURES	141
ITEM 9B.	OTHER INFORMATION	141
ITEM 9C.	DISCLOSURE REGARDING FOREIGN JURISDICTIONS THAT PREVENT INSPECTIONS	141
ITEM 10.	DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE	142
ITEM 11.	EXECUTIVE COMPENSATION	153
ITEM 12.	SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS	179
ITEM 13.	CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE	179
ITEM 14.	PRINCIPAL ACCOUNTING FEES AND SERVICES	181
ITEM 15.	EXHIBITS, FINANCIAL STATEMENT SCHEDULES	182
ITEM 16.	FORM 10-K SUMMARY	183

DEFINED TERMS

2005 SERP: Federal Home Loan Bank of Indianapolis 2005 Supplemental Executive Retirement Plan, as amended
advance: Secured loan to members, former members or Housing Associates
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
CARES Act: Coronavirus Aid, Relief and Economic Security Act
CDFI: Community Development Financial Institution
CFI: Community Financial Institution, an FDIC-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
CFTC: United States Commodity Futures Trading Commission
Clearinghouse: A United States Commodity Futures Trading Commission-registered derivatives clearing organization
CME: CME Clearing
CMO: Collateralized Mortgage Obligation
CO bond: Consolidated Obligation bond
COVID-19: Coronavirus Disease 2019 and its variants
DB Plan: Pentegra Defined Benefit Pension Plan for Financial Institutions, as amended
DC Plan: Collectively, the Pentegra Defined Contribution Retirement Savings Plan for Financial Institutions, as amended, in effect through October 1, 2020 and the Federal Home Loan Bank of Indianapolis Retirement Savings Plan, commencing October 2, 2020
DDCP: Directors' Deferred Compensation Plan
Dodd-Frank Act: Dodd-Frank Wall Street Reform and Consumer Protection Act, as amended
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
FCA: United Kingdom Financial Conduct Authority
FDIC: Federal Deposit Insurance Corporation
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
Final Membership Rule: Final Rule on FHLBank Membership issued by the Finance Agency effective February 19, 2016
Finance Agency: Federal Housing Finance Agency
FINRA: Financial Industry Regulatory Authority
FLA: First Loss Account
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
Frozen SERP: Federal Home Loan Bank of Indianapolis Supplemental Executive Retirement Plan, frozen effective December 31, 2004
GAAP: Generally Accepted Accounting Principles in the United States of America
Ginnie Mae: Government National Mortgage Association
GLB Act: Gramm-Leach-Bliley Act of 1999, as amended
GSE: United States Government-Sponsored Enterprise
HERA: Housing and Economic Recovery Act of 2008, as amended
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
HUD: United States Department of Housing and Urban Development

JCE Agreement: Joint Capital Enhancement Agreement, as amended, among the 11 FHLBanks
LCH: LCH.Clearnet LLC
LIBOR: London Interbank Offered Rate
LRA: Lender Risk Account
LTV: Loan-to-Value
MAP-21: Moving Ahead for Progress in the 21st Century Act, enacted on July 6, 2012
MBS: Mortgage-Backed Securities
MCC: Master Commitment Contract
MDC: Mandatory Delivery Commitment
Moody's: Moody's Investor Services
MPF: Mortgage Partnership Finance®
MPP: Mortgage Purchase Program, including Original and Advantage unless indicated otherwise
MRCS: Mandatorily Redeemable Capital Stock
MVE: Market Value of Equity
NRSRO: Nationally Recognized Statistical Rating Organization
OCC: Office of the Comptroller of the Currency
OCI: Other Comprehensive Income (Loss)
OIS: Overnight-Indexed Swap
ORERC: Other Real Estate-Related Collateral
OTTI: Other-Than-Temporary Impairment or -Temporarily Impaired (as the context indicates)
PFI: Participating Financial Institution
PMI: Primary Mortgage Insurance
REMIC: Real Estate Mortgage Investment Conduit
REO: Real Estate Owned
RMBS: Residential Mortgage-Backed Securities
S&P: Standard & Poor's Rating Service
Safety and Soundness Act: Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended
SBA: Small Business Administration
SEC: Securities and Exchange Commission
Securities Act: Securities Act of 1933, as amended
SERP: Collectively, the 2005 SERP and the Frozen SERP
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
TDR: Troubled Debt Restructuring
TVA: Tennessee Valley Authority
UPB: Unpaid Principal Balance
VaR: Value at Risk
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 determined by the Federal Reserve and the FDIC, 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 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, 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, GSE's generally, one or more of the FHLBanks and/or investors in the consolidated obligations of the FHLBanks;
- national or international health crises, such as the COVID-19 pandemic, including any resurgence of the pandemic, new and evolving pandemic strains, and the effects of health 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;
- 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 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 "Bank," "we," "us," and "our," 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 investment. Our advance and mortgage purchase programs 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, such as securities safekeeping and wire transfers. We also help to meet the economic and housing needs of communities and families through grants and low-cost advances that help support affordable housing and economic development initiatives.

We are wholly owned by our member institutions. All federally insured depository institutions (including commercial banks, savings associations 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.*

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.

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 our public policy mission and our goal of providing adequate returns on our members' capital.

The Finance Agency is the federal regulator of the FHLBanks, Fannie Mae and Freddie Mac, which includes oversight of Common Securitization Solutions, a joint venture owned by Fannie Mae and Freddie Mac that facilitates the issuance of their Uniform MBS. 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. The Finance Agency's operating expenses with respect to the FHLBanks are funded by assessments on the FHLBanks. No tax dollars are used to support the operations of the Finance Agency relating to the FHLBanks.

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 LIBOR, SOFR and the FHLBanks cost of funds index. While LIBOR-indexed floaters are the most common type of adjustable-rate advances we have outstanding to our members, we no longer offer new LIBOR-indexed adjustable-rate advances. 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;
- **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 decrease.

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 ORERC 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, utilize balance sheet capacity and supplement our earnings. Higher earnings bolster our ability to support affordable housing and community investment.

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 securities. 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 securities.

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 by a Finance Agency regulation and Advisory Bulletin, as well as internal policy, from purchasing certain types of investments, such as interest-only or principal-only stripped MBS, CMOs and REMICs; 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.

In 2012 - 2014, we purchased participating interests from the FHLBank of Topeka in mortgage loans originated by certain of its PFIs through their participation in the MPF Program.

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

- *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 reflects 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.

- *Advantage MPP.* The LRA for Advantage MPP differs from our original MPP in that 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 120 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.

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. We consider the cost of the credit enhancement (LRA and SMI, if applicable) when we formulate conventional loan pricing. 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 also adjust the market price we pay for loans depending upon market conditions. 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. For more information, see *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Risk Management - Credit Risk Management - Mortgage Loans Held for Portfolio - MPP*.

Housing Goals. The Bank Act requires the Finance Agency to establish low-income housing goals for mortgage purchases. The Finance Agency issued a final FHLBank Housing Goals rule in 2020. The rule establishes two goals for any FHLBank that acquires mortgages in an AMA program during a year: (i) a prospective target of 20% of the number of an FHLBank's total AMA mortgage purchases for its purchases of mortgage loans to very low-income families, low-income families, or families in low-income areas; and (ii) a separate small-member participation housing goal with a target level of 50% of an FHLBank's total AMA users. The rule provides that an FHLBank may request Finance Agency approval of alternative target levels for either or both of these goals. If we fail to meet one or both goals, we may be required to submit a housing plan to the Finance Agency. The rule took effect August 24, 2020, and enforcement will phase in through December 31, 2023. During the phase-in period, the Finance Agency will monitor and report our housing goals performance, but will not impose a housing plan remedy if we fail to meet either or both of the housing goal target levels.

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 LIBOR, EFFR, 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*.

Affordable Housing Programs, Community Investment and Small Business Grants

Each FHLBank is required to set aside 10% of its annual net earnings before interest expense on MRCS to fund its AHP, subject to an annual FHLBank System-wide minimum of $100 million. If the FHLBanks' aggregate 10% contribution were less than $100 million, each FHLBank would be required to contribute an additional pro-rata amount. The proration would be based on the net earnings of each FHLBank in relation to the net earnings of all FHLBanks for the previous year, up to the Bank's annual net earnings. The FHLBanks' aggregate contribution exceeded the minimum of $100 million in 2021 and 2020.

If we determine that our required AHP contributions are adversely affecting our financial stability, we may apply to the Finance Agency for a temporary suspension of our contributions. We did not file an application in 2021 or 2020.

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, 2021 or 2020, 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; 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 2021.

In addition, we offer a variety of specialized advance programs to support housing and community development needs. Through our Community Investment Program ("CIP"), 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, 2021 and 2020, we had $873 million and $753 million, respectively, of outstanding principal on CIP-related advances.

We also offer small business grants under our Elevate program, which is designed to support the growth and development of small businesses in Michigan and Indiana by providing funding for capital expenditures, workforce training, or other business-related needs. The total amounts (in thousands) awarded in 2021, 2020 and 2019 were $520, $503 and $392, respectively.

Community Mentors is an annual community engagement and economic development leadership program which includes a workshop and accompanying implementation grant of $10 thousand to one Indiana and one Michigan community which is awarded following an application process.

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. 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*.

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, relationship 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.

The Bank Act. We are supervised and regulated by the Finance Agency, an independent agency in the executive branch of the United States government, established by HERA.

Under the Bank Act, the Finance Agency's responsibility is to ensure that, pursuant to 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 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 Director appoints a Deputy Director for the Division of Enterprise Regulation, a Deputy Director for the Division of FHLBank Regulation, and a Deputy Director for Housing Mission and Goals, who oversees the housing mission and goals of Fannie Mae and Freddie Mac, as well as the housing finance and community and economic development mission of the FHLBanks. HERA also established the Federal Housing Finance Oversight Board, comprised of the Secretaries of the Treasury and HUD, 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. We have been, and continue to be, subject to all relevant liability provisions of the Securities Act and the Exchange 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. Federal law requires that, when a mortgage loan (defined to include any consumer credit transaction secured by the principal dwelling of the consumer) is sold or transferred, the new creditor shall, within 30 days of the sale or transfer, notify the borrower of the following: the identity, address and telephone number of the new creditor; the date of transfer; how to contact an agent or party with the authority to act on behalf of the new creditor; the location of the place where the transfer is recorded; and any other relevant information regarding the new creditor. In accordance with this statute, we provide the appropriate notice to borrowers whose mortgage loans we purchase under our MPP and have established procedures to ensure compliance with this notice requirement.

Regulatory Enforcement Actions. While examination reports are confidential between the Finance Agency and an FHLBank, the Finance Agency may publicly disclose supervisory actions or agreements that the Finance Agency has entered into with an FHLBank. We are not subject to any such Finance Agency actions, and we are not aware of any current Finance Agency actions with respect to other FHLBanks that could have a material adverse effect on our financial results.

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, 2021	% of Total	December 31, 2020	% of Total
Commercial banks and savings associations	168	48 %	176	49 %
Credit unions	128	37 %	129	36 %
Insurance companies	48	14 %	50	14 %
CDFIs	4	1 %	4	1 %
Total member institutions	348	100 %	359	100 %

In 2021, no new members were added and 11 members merged, consolidated, or terminated. There was no significant impact on our business as a result of the reduction in membership.

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.

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 newly-established hub in Detroit, Michigan. As of December 31, 2021, the Bank had 237 full-time and 2 part-time employees, of which 61% were male and 39% were female, while 75% were non-minority and 25% were minority.

Our workforce historically has included a large number of longer-tenured employees. As of December 31, 2021, the average tenure of the Bank's employees was 8.2 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, enhance business performance and provide a reasonable risk-return balance for our cooperative members, both as users of our products and as shareholders, tailored to our status and risk appetite as a housing GSE. We strive to both develop talent from within and supplement talent with external hires. We believe that developing talent internally results in institutional strength and continuity and promotes 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 credit opportunities to reduce the net cost of medical insurance to qualifying participants;
    - 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
    - An online portal to inspire fitness and health goals;
- Employee engagement
    - Employee resource groups; and
    - Cultural and inclusion initiatives;
- 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, illness, personal, holiday, 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 the Bank's 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.

We are committed to the health, safety, and wellness of our employees. In response to the continuing COVID-19 pandemic, we have continued significant operating environment changes, safety protocols and procedures that we have determined are in the best interest of our employees and members, and which comply with government regulations. In addition, the majority of our employees continue to work remotely to support safety protocols.

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 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 awareness events, and employee resource groups.

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. A link to EDGAR is available through our public website at www.fhlbi.com by selecting "News" 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 by scrolling to the bottom of any web page on www.fhlbi.com and then selecting "Corporate Governance" in the navigation menu.

Our 2022 Targeted Community Lending Plan describes our plan to address the credit needs and market opportunities in our district states of Michigan and Indiana. It is available on our website at www.fhlbi.com/materials under "Bulletins, Publications, and Presentations."

The written charters adopted by the board for its Audit, Executive/Governance, and Human Resources Committees are available on our website by scrolling to the bottom of any web page on www.fhlbi.com and then selecting "Corporate Governance" in the navigation menu. These charters were most recently amended by the board of directors as to the Audit Committee on March 19, 2021, as to the Executive/Governance Committee on January 21, 2022, and as to the Human Resources Committee on January 22, 2021.

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 2022 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

The COVID-19 Pandemic and Related Developments Have Resulted in Substantial Economic Uncertainty and Financial Market Disruptions As Well As Significant Strategic and Operational Challenges.

Economic Uncertainty. The COVID-19 pandemic and related developments, including governmental and public actions taken in response, such as shelter-in-place, stay-at-home or similar orders, travel restrictions and business shutdowns, have resulted in substantial uncertainty about the overall economic environment and could continue to do so. Despite significant improvements in the overall U.S. economy since the outbreak of the pandemic, considerable uncertainty remains. The uncertainty results from a myriad of factors including: possibilities of virus resurgence from further variants; vaccination rates; inflation; and supply chain disruptions. These factors could slow the timing and weaken the strength of the economic recovery or result in an economic downturn. A slower or weak economic recovery or economic downturn could adversely affect our business, financial condition, results of operations, ability to pay dividends and redeem or repurchase capital stock.

Financial Market Disruptions. This same uncertainty has resulted in highly volatile financial markets and resultant financial market disruptions, characterized by sharp changes to interest rates and spreads and availability of funds from time to time, and it may continue to do so. While these disruptions have been short-lived and have not materially affected us, there can be no guarantee that this will continue. Longer disruptions may adversely affect us in many ways including reduced market access to funding and increased costs of funding. The potential impact of the realization of such risks is discussed under "*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."* Prolonged financial market disruptions may also result in decreased valuations of and reduced market and book yields on our assets.

Strategic Challenges. Federal relief efforts designed to support the residential mortgage finance market during the pandemic have provided alternative sources of liquidity to our members, reducing their need for advances, and our advances balances have decreased as a result. Further, the Federal Reserve materially increased its holdings of Agency MBS, thereby increasing GSE purchase prices for conforming mortgages and reducing demand for our MPP. A prolonged reduction in demand for our products and services could adversely affect us in the same way as competition may adversely affect us as discussed under "*Competition Could Negatively Impact Advances, the Supply of Mortgage Loans for our MPP, Our Access to Funding and Our Earnings.*"

Operational Challenges. Our ordinary operations have been impacted by the various public orders and restrictions issued in response to the pandemic. Examples of these include shelter-in-place, stay-at-home or similar orders, travel restrictions and business shutdowns. These have resulted in work-from-home arrangements, for us as well as for many of our members, dealers and other third-party service providers. These actions, together with the direct and indirect effect of COVID-19 infections (such as staffing disruptions), have resulted in and are expected to continue to result in significant operational challenges, including increased operational risks and risks of cybersecurity breaches. The potential impacts of the realization of such risks are discussed under *"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.."*

The pandemic has also resulted in disruptions to the labor market and could continue to do so. This could adversely affect us as discussed under "*The Inability to Identify Eligible Nominees for our Board of Directors and to Attract and Retain Key Personnel Could Adversely Affect Our Operations, Our Results of Operations, and Our Ability to Satisfy our Mission."*

Economic Conditions and Policy, Global Political or Economic Events, a Major Natural Disaster, or Widespread Health Crises 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, such as changes in the money supply, inflation, volatility in both debt and equity capital markets, and the strength of the local economies in which we conduct business.

Our business and results of operations are significantly affected by the fiscal and monetary 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. The Federal Reserve's policies either directly or indirectly influence 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. For example, in response to the COVID-19 pandemic, the FOMC has maintained a target range of 0.00% to 0.25% for the federal funds rate since March 15, 2020 and increased its holdings of U.S. Treasuries and Agency MBS, thereby lowering Agency MBS yields and increasing GSE purchase prices for conforming mortgages. These actions have adversely affected us through lower yields on our investments, higher costs of debt, and disruption of member demand for our products although the Federal Reserve has recently indicated its plans to raise the federal funds target range and taper net asset purchases.

By way of further example, we, together with the other FHLBanks, currently play a predominant role as lenders in the federal funds market; therefore, any disruption in the federal funds market or any related regulatory or policy change may adversely affect our cash management activities, results of operations, and reputation.

Additionally, we are affected by the global economy through member ownership and investments, and through capital markets exposures. Global political, economic, and business uncertainty has led to increased volatility in capital markets and has the potential to drive volatility in the future. One example of this has been realized through the COVID-19 pandemic as discussed under "*The COVID-19 Pandemic and Related Developments Have Resulted in Substantial Economic Uncertainty and Financial Market Disruptions As Well As Significant Strategic and Operational Challenges.*" Another example has been realized through the geopolitical instability brought about by ongoing hostilities between Russia and Ukraine, which have led to economic and trade disruptions as well as sanctions. These and related developments have increased volatility in certain capital markets, which could lead to overall greater volatility in global capital markets particularly should the hostilities continue for an extended period with further resulting disruptions and sanctions.

Likewise, a major natural disaster or other catastrophic event, whether caused by climate change or otherwise, another health crisis, as well as international responses to such events, could increase economic uncertainties and lead to further global capital market volatility, lower credit availability, and weaker economic growth. Our members, counterparties and vendors could experience similar negative effects. As a result, our business could be exposed to unfavorable market conditions, lower demand for mission-related assets, increased risk of credit losses, lower earnings, or reduced ability to pay dividends or redeem or repurchase capital stock.

We Are Directly Impacted by the Condition of the Housing and 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 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 and possible additional realized losses if we were forced to liquidate our MPP portfolio.

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. For more information, see *Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations - Executive Summary - Business Environment.*

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 materially 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 CFTC, 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 materially adversely affect our business.

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.

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 value of assets we acquire and the collateral we accept could increase our risk of credit loss. For example, the CFPB has issued rules that 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."*

As another example, FINRA Rule 4210, which is currently proposed to take effect on October 26, 2022, would require us to exchange margin on certain MBS transactions. Materially greater margin requirements - due to FINRA Rule 4210, or otherwise - could adversely affect the availability and pricing of our derivative transactions, making such trades more costly and less attractive as risk management tools. New and expanded margin requirements on derivatives and MBS could also change our risk exposure to our counterparties and may require us to further enhance our systems and processes.

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 may 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."*

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

Risk Management. Changes that constrain the way we manage risk could adversely affect our earnings. For example, a Finance Agency advisory bulletin set forth limits for funding gaps and possible asset and liability mismatches. These limits could adversely affect our net interest margin and, in turn, our dividend rate.

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, the SEC's implementation of money market fund reforms from 2010 to 2016 resulted in a significant increase in demand for U.S. government and agency debt, including the FHLBanks' short-term consolidated obligations. The holding of the FHLBanks' consolidated obligations by money market funds, as a percentage of the total outstanding consolidated obligations, generally increased as a result of these reforms until recent periods. While demand from these investors benefited our ability to access short-term funding at attractive costs, this demand could change if money market investor risk and return preferences and money market regulatory requirements shift over time. A decrease in this demand could, due to the FHLBanks' concentration in money market investors, lead to significant investor outflows and unfavorable market conditions.

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 earnings.

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.

Under the GLB Act, Finance Agency regulations, and our capital plan, our capital stock may be redeemed upon the expiration of a five-year redemption period, subject to certain conditions. 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.

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 large 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. As the financial industry continues to consolidate into a smaller number of institutions, this could lead to further loss of large members and a related decrease in our membership and significant loss of business.

For example, in April 2021, Flagstar Bancorp, Inc., the parent company of Flagstar Bank, FSB ("Flagstar"), historically one of our largest and most active borrowers, announced it had reached an agreement to merge with another institution and, pursuant to the agreement, Flagstar would merge with a non-member depository. On the effective date of the Flagstar merger, the successor bank would not be eligible for membership in our Bank. At December 31, 2021, Flagstar had advances outstanding totaling $3.0 billion or 11% of the Bank's total advances outstanding, at par. As a result, as with the loss of any large borrower, the consummation of the expected Flagstar merger could have a material adverse effect upon our future results of operations.

Our largest borrower had advances outstanding at December 31, 2021 totaling $3.1 billion, or 12% of our total advances outstanding, at par. If advances are concentrated in a smaller number of members, our risk of loss resulting from a single event could become greater. Loss of other large advance borrowers, without replacement of such advances by existing or new members, would be expected to reduce our interest income and profitability accordingly.

Significant PFIs. During the year ended December 31, 2021, our top-selling PFI sold us mortgage loans totaling $218 million, or 10% of the total mortgage loans purchased by the Bank in 2021. 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 mortgage servicers could adversely affect our results of operations.

Financial Counterparties. The number of counterparties that meet our internal and regulatory standards for derivative, repurchase, federal funds sold, TBA, and other financial transactions, such as broker-dealers and their affiliates, has decreased over time. In addition, since the Dodd-Frank Act, the requirements for posting margin or other collateral to financial counterparties has tended to increase, both in terms of the amount of collateral to be posted and the types of transactions for which margin is now required. These factors tend to increase the risk exposure that we have to any one counterparty, and as such may tend to increase our reliance upon each of our counterparties. A failure of any one of our major financial counterparties, or continuing market consolidation, could affect our profitability, results of operations, and ability to enter into additional transactions with existing counterparties without exceeding internal or regulatory risk limits.

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, certain regulatory responses to the COVID-19 pandemic have greatly increased our competitive environment with attendant risks and adverse effects as discussed in *"Economic Conditions and Policy, Global Political or Economic Events, a Major Natural Disaster, or Widespread Health Crises Could Have an Adverse Effect on Our Business, Liquidity, Financial Condition, and Results of Operations."*

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 stable 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.

Uncertainty remains regarding possible longer-term effects resulting from rating actions. Any future downgrades in the credit ratings and outlook, 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.

The Inability to Identify Eligible Nominees for our Board of Directors and 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 legal requirements that could disqualify prospective nominees that would otherwise have the talent and experience necessary for the role. For example, at least 40% of our board of directors' seats must be held by independent directors, who must meet certain specialized and narrow eligibility requirements (including citizenship, residency and expertise) but are subject to specific term limits. We currently have eight independent directors on our board. One of the independent directors will be term-limited as of December 31, 2022, and two others will be term-limited as of December 31, 2023. All three have served as directors of the Bank for 13 or more years. Thus, the term limits will result in our inability to re-nominate those directors resulting in the board's loss of their talent and experience. While our board has established and maintains a Succession Planning Committee to assist it with respect to succession planning for directorships, such legal requirements may challenge our ability to find prospective nominees who have specific expertise and specialized skills that meet the eligibility requirements.

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 higher employee turnover and increased competition in hiring and retaining skilled key personnel due to the significant disruptions and changes to the U.S. labor market that have resulted from the COVID-19 pandemic. Failure to attract and retain skilled key personnel, or failure to develop and implement an effective succession plan, 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. As an example, the COVID-19 pandemic has resulted in possible increases to our credit risk, as discussed under *"The COVID-19 Pandemic and Related Developments Have Resulted in Substantial Economic Uncertainty and Financial Market Disruptions As Well As Significant Strategic and Operational Challenges."*

<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 deterioration of residential or commercial real estate property values could further affect the mortgages pledged as collateral for advances. 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 they fail to perform their contractual obligations.

<u>*Investment Securities*</u>. The MBS market continues to face uncertainty over the potential changes in the Federal Reserve's holdings of MBS and the effect of any new or proposed actions. Additionally, future 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, 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 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. If the required contribution is increased or we become liable for a pro-rata share of the System's annual minimum contribution, our prior year's 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 Response to the Replacement of the LIBOR Benchmark Interest Rate Could Adversely Affect Our Business, Financial Condition and Results of Operations.

Cessation of the Use of LIBOR. A portion of our assets and liabilities remain directly or indirectly indexed to LIBOR. The one-week and two-month U.S. dollar LIBOR settings and all non-U.S. dollar LIBOR settings ceased to be provided by any administrator and were no longer representative as of January 1, 2022. The remaining U.S. dollar LIBOR settings will either cease to be provided by any administrator or no longer be representative immediately after June 30, 2023. Although the FCA has indicated that it does not expect the remaining U.S. dollar LIBOR settings to become unrepresentative before the cessation date, there is no assurance that any of them will continue to be published or be representative through any particular date.

We have endeavored to identify and amend our financial instruments and contracts that may require adding or adjusting fallback language, including advances, investments and derivatives. Despite these efforts, the contractual consequences of LIBOR cessation for some existing LIBOR-indexed instruments may not be clear.

During 2021, we fully ceased purchasing investments or entering into financial instruments that reference LIBOR and mature after December 31, 2021. In addition, we have altered our hedging and interest-rate risk management strategies. Although the last of our consolidated obligations indexed to LIBOR matured in 2021, a portion of our assets remain indexed to LIBOR, with continuing exposure. As a result, we could experience disruptions in our access to funding; higher funding costs; increased basis risk; or lower overall demand or increased costs for advances. These developments could negatively affect the composition of our balance sheet, capital stock levels, asset mix and net income. As LIBOR has been a principal floating-rate benchmark in the financial markets, its cessation has affected, and will continue to affect, the financial markets generally and our business, financial condition, and results of operations.

Adoption of SOFR. We continue to take steps to adopt SOFR, the alternative to U.S. dollar LIBOR recommended by the Alternative Reference Rates Committee for our relevant products, services and financial instruments. Since 2018, market activity in SOFR-linked financial instruments has continued to develop; however, the market transition from LIBOR to SOFR or another alternate reference rate has been and is expected to continue to be complicated, including the development of term and credit adjustments to accommodate differences between LIBOR and SOFR or any other alternate reference rate as well as other market conventions. In addition, the overnight Treasury repurchase market underlying SOFR has experienced and could continue to experience disruptions from time to time, which has resulted and may continue to result in unexpected fluctuations in SOFR. The introduction of alternate reference rates also creates challenges in hedging and asset-liability management and may result in additional basis risk and increased volatility. While market activity in SOFR- linked financial instruments has continued to develop, the progress has been uneven and there can be no guarantee that SOFR will become widely accepted and used across market segments and financial products in a timely manner and any other alternative reference rate may or may not be developed. Further, a robust member demand for SOFR-linked advances has yet to develop. Any disruption in the market transition towards SOFR or another alternate reference rate could result in increased financial, operational, legal or reputational risks to us.

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 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.

Although derivatives are used to mitigate market risk, they also introduce the potential for short-term earnings volatility, principally due to basis risk because we must use the OIS curve instead of the LIBOR curve as the discount rate to estimate the fair values of collateralized LIBOR-based derivatives while many of the hedged items currently on the balance sheet are still valued using the LIBOR curve. Additionally, our U.S. Treasury liquidity portfolio is economically hedged with OIS interest rate swaps and may introduce income volatility due to non-symmetrical changes in U.S. Treasury rates and OIS swap rates.

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. Changes to the regulatory environment that affect investors and dealers of consolidated obligations have affected, and will continue to affect, our ability to access the capital markets on acceptable terms as discussed under *"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."* Any further 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. 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, 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. By way of example, one model's predictions of prepayment speeds has proven to be inaccurate in the current economic environment. 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.

Natural Disasters, Including those Resulting from Significant Climate Change, 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. These natural disasters 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 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 use approximately 108,200 square feet. We lease the remaining 8,800 square feet. We also 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 was amended and restated effective September 26, 2020. The amended plan continues to provide for two sub-series of Class B capital stock: Class B-1 and Class B-2. Under the amended plan, 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. However, Class B-1 stock is automatically reclassified as Class 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 in order to fully meet that requirement. In addition, excess Class B-2 stock is automatically reclassified as Class B-1. The amended plan does not require that stock under redemption be converted or reclassified from one class to another. By contrast, under our prior capital plan in effect through September 25, 2020, Class B-1 was stock held by our members that was not subject to a redemption request, and Class B-2 stock consisted solely of required stock that was subject to a redemption request.

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, 2021, such Class B-2 stock issued and outstanding totaled $65 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, 2021, the board of directors had not authorized the issuance of Class A stock.

Number of Shareholders

As of February 28, 2022, we had 357 shareholders and $2.1 billion par value of regulatory capital stock, which includes Class B stock and MRCS issued and outstanding. As of February 28, 2022, 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 previous 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, 2021, our excess stock was 1.40% 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 - Liquidity and Capital Resources - 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 "Bank", "we," "us," and "our," 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. Therefore, it 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 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 interest-free capital. We use funding and hedging strategies to manage the related interest-rate risk.

Due to our cooperative 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.

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 economic and market factors, including fiscal and monetary policies, the strength of the housing markets and the level and volatility of market interest rates.

Economy and Financial Markets. U.S. real gross domestic product ("GDP") increased at an annual rate of 7.0% in the fourth quarter of 2021 after increasing at an annual rate of 2.3% in the third quarter of 2021, as reported by the Bureau of Economic Analysis. The acceleration in the fourth quarter was led by an upturn in exports as well as accelerations in inventory investment and consumer spending. However, in some parts of the country, COVID-19 cases resulted in continued restrictions and disruptions in the operations of establishments. In addition, government assistance payments in the form of forgivable loans to businesses, grants to state and local governments, and social benefits to households all decreased as provisions of several federal programs expired or tapered off.

In January 2022, the Bureau of Labor Statistics reported that the U.S. unemployment rate had declined to 3.9% in December 2021, compared to 6.7% in December 2020. Employment growth continued in leisure and hospitality, professional and business services, retail trade, and transportation and warehousing.

Inflation has become a huge challenge to economic growth. The annual inflation rate for the U.S. in 2021 was 7.0%, the highest since 1982, as reported by the U.S. Department of Labor.

Conditions in U.S. Housing Markets. The seasonally adjusted annual rate of U.S. existing home sales declined by 8% in 2021, compared to 2020, attributed to low housing inventory levels and higher home prices. However, U.S. existing home sales unexpectedly increased in January, but investors purchasing in cash are squeezing out first-time buyers from the housing market amid record low inventory and higher prices. The surge in sales of existing homes also reflected buyers rushing to close contracts in anticipation of mortgage rates increasing.

Sales of new U.S. homes retreated in January after a flurry of purchases at the end of 2021, indicating the increases in mortgage rates may be starting to restrain demand. While underlying demand for new homes remains solid, fueled in part by record low inventory in the resale market, the highest mortgage rates since mid-2019 present a headwind. Higher materials costs are also contributing to housing price inflation and sidelining many prospective buyers. A further moderation in sales may help builders chip away at construction backlogs that are still elevated due to supply and transportation delays.

Interest Rate Levels and Volatility. The level and volatility of interest rates and credit spreads were affected by several factors during 2021, principally the continued economic recovery from the COVID-19 pandemic and efforts in response by the Federal Reserve to maintain low short-term interest rates and facilitate liquidity. Overall economic conditions and financial regulation also continue to be influencing factors.

Since March 15, 2020, the FOMC has maintained a target range for the federal funds rate of 0.0% to 0.25%, noting that the COVID-19 pandemic had harmed communities and disrupted economic activity in many countries, including the United States. At its meeting in January 2022, the FOMC maintained the federal funds target range, and signaled that it would continue the process of gradually tapering its purchases of Treasury securities and Agency MBS, as the economic recovery remains broadly on track. However, in response to inflation concerns, the FOMC has indicated that it expects to raise the target range for the federal funds rate beginning in March.

The following table presents certain key interest rates for both the twelve-month averages for 2021 and 2020 and at December 31, 2021 and 2020.

	Twelve-Month Average		December 31,	
	2021	2020	2021	2020
Federal Funds Effective	0.08 %	0.36 %	0.07 %	0.09 %
SOFR	0.04 %	0.36 %	0.05 %	0.07 %
Overnight LIBOR	0.08 %	0.37 %	0.06 %	0.08 %
1-week OIS	0.08 %	0.36 %	0.08 %	0.09 %
3-month LIBOR	0.16 %	0.65 %	0.21 %	0.24 %
3-month U.S. Treasury yield	0.04 %	0.35 %	0.04 %	0.07 %
2-year U.S Treasury yield	0.26 %	0.39 %	0.73 %	0.12 %
10-year U.S. Treasury yield	1.44 %	0.89 %	1.51 %	0.92 %

The averages of short-term interest rates were significantly lower during 2021, compared to 2020, impacting the Bank's results of operations, primarily by decreasing both interest income and interest expense. However, longer-term interest rates, while still relatively low, increased in 2021 compared to 2020. Changes in the short- and long-term interest rates also impacted the fair values of certain assets and liabilities of the Bank.

Impact on Operating Results. Market interest rates and trends affect yields and margins on earning assets, including advances, purchased mortgage loans, and our investment portfolio, which contribute to our overall profitability. Additionally, 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, can 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, can 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.

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 can drive interest rates higher, which can impair growth of the mortgage market. A less active mortgage market can affect demand for advances and activity levels in our Advantage MPP. However, 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. Member demand for liquidity during stressed market conditions can lead to advances growth.

Results of Operations and Changes in Financial Condition

Results of Operations for the Years Ended December 31, 2021 and 2020. The following table presents the comparative highlights of our results of operations ($ amounts in millions).

Condensed Statements of Comprehensive Income	Years Ended December 31, 2021	2020	$ Change	% Change
Net interest income	$ 252	$ 263	$ (11)	(4)%
Provision for (reversal of) credit losses	—	—	—	
Net interest income after provision for credit losses	252	263	(11)	(4)%
Other income (loss)	(34)	(55)	21	
Other expenses	113	109	4	
Income before assessments	105	99	6	6 %
AHP assessments	11	11	—	
Net income	94	88	6	7 %
Total other comprehensive income (loss)	28	38	(10)	
Total comprehensive income	$ 122	$ 126	$ (4)	(3)%

The increase in net income for the year ended December 31, 2021 compared to the prior year was primarily due to lower but still accelerated amortization of mortgage purchase premiums resulting from higher prepayments on mortgage loans and net hedging gains on qualifying fair-value hedging relationships, substantially offset by lower earnings on the portion of the Bank's assets funded by its capital and lower net interest income resulting from the decline in average asset balances.

The decrease in total OCI for the year ended December 31, 2021 compared to the prior year was primarily due to lower unrealized gains on AFS securities, partially offset by a change in net pension benefits.

The return on assets and return on equity for the year ended December 31, 2021 was 0.15% and 2.64%, respectively, compared to 0.13% and 2.67%, respectively, for the year ended December 31, 2020.

Results of Operations for the Years Ended December 31, 2020 and 2019. A comparison of our results of operations for the years ended December 31, 2020 and 2019 is contained in the corresponding Item 7 in our 2020 Form 10-K, filed with the SEC on March 10, 2021.

Adjusted Net Income, a Non-GAAP Financial Measure. The Bank reports its results of operations in accordance with GAAP. Management believes that a non-GAAP financial measure may also be useful to shareholders and other stakeholders as a key measure of its operating performance. Such measure can also provide additional insights into period-to-period comparisons of the Bank's operating results beyond its GAAP results, which are impacted by temporary changes in fair value and other factors driven by market volatility that hinder consistent performance measurement. As a result, the Bank is reporting adjusted net income as a non-GAAP financial measure.

Adjusted net income represents GAAP net income adjusted to exclude: (i) the mark-to-market adjustments and other transitory effects from derivatives and trading/hedging activities, (ii) interest expense on MRCS, (iii) realized gains and losses on sales of investment securities, and (iv) at the discretion of management, other eligible non-routine transactions. These adjustments reflect (i) the temporary nature of fair-value and certain other hedging gains (losses) due to the Bank's practice of holding its financial instruments to maturity, (ii) the treatment of interest on MRCS as dividends, (iii) the impact of the sale of investment securities, primarily for liquidity purposes or to reduce exposure to LIBOR-indexed instruments, the gains (losses) on which arise from accelerating the recognition of future income (expense), and (iv) any other eligible non-routine transactions that management determines can provide additional insights into period-to-period comparisons of the Bank's operating results beyond its GAAP results.

Non-GAAP financial measures are not audited. In addition, non-GAAP financial measures have no standardized measurement prescribed by GAAP and may not be comparable to similar non-GAAP financial measures used by other companies. While the Bank believes that adjusted net income is helpful in understanding the Bank's performance, this measure has limitations as an analytical tool and should not be considered in isolation or as a substitute for analyses of earnings reported in accordance with GAAP.

The following table presents a reconciliation of the Bank's GAAP net income to adjusted net income ($ amounts in millions):

	Years Ended December 31,	
Reconciliation of Net Income	**2021**	**2020**
GAAP net income	$ 93.9	$ 87.9
Adjustments to exclude:		
Fair-value hedging (gains) losses [1]	(8.4)	12.2
Amortization/accretion of (gains) losses on active and discontinued fair-value hedging relationships [2]	37.9	(0.1)
Trading (gains) losses, net of economic hedging gains (losses) [3]	32.8	11.0
Net unrealized losses on other economic hedges	1.2	1.2
Interest expense on MRCS	2.6	8.6
Net realized gains on sales of investment securities	—	(0.5)
Total adjustments	66.1	32.4
AHP assessments on adjustments	(6.4)	(2.4)
Adjusted net income (non-GAAP measure)	$ 153.6	$ 117.9

(1) Changes in fair value on hedged items (attributable to the risk being hedged) and associated derivatives in qualifying hedging relationships.
(2) Gains (losses) resulting from cumulative basis adjustments on hedged items.
(3) Includes both (i) unrealized (gains) losses on trading securities and (ii) realized (gains) losses on maturities of trading securities.

Adjusted net income for the year ended December 31, 2021 was $153.6 million, an increase of $35.7 million compared to the prior year. The increase was primarily due to higher interest spreads, lower accelerated amortization of mortgage purchase premiums and higher earnings (excluding net gains and losses) on trading securities, partially offset by lower earnings on the portion of the Bank's assets funded by its capital and lower net interest income resulting from the decline in average asset balances.

Changes in Financial Condition for the Year Ended December 31, 2021. The following table presents the comparative highlights of our changes in financial condition ($ amounts in millions).

Condensed Statements of Condition	December 31, 2021	December 31, 2020	$ Change	% Change
Advances	$ 27,498	$ 31,347	$ (3,849)	(12)%
Mortgage loans held for portfolio, net	7,616	8,516	(900)	(11)%
Cash and short-term investments [1]	7,048	5,627	1,421	25 %
Investment securities and other assets [2]	17,843	20,435	(2,592)	(13)%
Total assets	$ 60,005	$ 65,925	$ (5,920)	(9)%
Consolidated obligations	$ 54,478	$ 59,950	$ (5,472)	(9)%
MRCS	50	251	(201)	(80)%
Other liabilities	1,921	2,274	(353)	(16)%
Total liabilities	56,449	62,475	(6,026)	(10)%
Capital stock	2,246	2,208	38	2 %
Retained earnings [3]	1,177	1,137	40	3 %
AOCI	133	105	28	26 %
Total capital	3,556	3,450	106	3 %
Total liabilities and capital	$ 60,005	$ 65,925	$ (5,920)	(9)%
Total regulatory capital [4]	$ 3,473	$ 3,596	$ (123)	(3)%

(1) Includes cash, interest-bearing deposits, securities purchased under agreements to resell, and federal funds sold.
(2) Includes trading, AFS and HTM securities.
(3) Includes restricted retained earnings at December 31, 2021 and 2020 of $287 million and $268 million, respectively.
(4) Total capital less AOCI plus MRCS.

Total assets at December 31, 2021 were $60.0 billion, a net decrease of $5.9 billion, or 9%, from December 31, 2020, driven primarily by a net decrease in advances.

Advances outstanding at December 31, 2021, at carrying value, totaled $27.5 billion, a net decrease of $3.8 billion, or 12%, from December 31, 2020. The par value of advances to depository institutions - comprising commercial banks, savings institutions and credit unions - and insurance companies decreased by 17% and 3%, respectively.

Mortgage loans held for portfolio at December 31, 2021 totaled $7.6 billion, a net decrease of $900 million, or 11%, from December 31, 2020, as principal payments by borrowers significantly outpaced the Bank's purchases from its members during the period.

The liquidity portfolio, which consists of cash and short-term investments as well as U. S. Treasury securities, at December 31, 2021 totaled $10.9 billion, a net increase of $273 million, or 3%, from December 31, 2020. Cash and short-term investments increased by $1.4 billion, or 25%, to $7.0 billion. U.S. Treasury securities, classified as trading securities, decreased by $1.1 billion, or 23%, to $3.9 billion. As a result, cash and short-term investments represented 64% of the liquidity portfolio at December 31, 2021, while U.S. Treasury securities represented 36%.

The Bank's consolidated obligations outstanding at December 31, 2021 totaled $54.5 billion, a net decrease of $5.5 billion, or 9%, from December 31, 2020, which reflected reduced funding needs associated with the net decrease in the Bank's total assets.

Total capital at December 31, 2021 was $3.6 billion, a net increase of $106 million or 3%, from December 31, 2020.

The Bank's regulatory capital-to-assets ratio at December 31, 2021, was 5.79%, which exceeds all applicable regulatory capital requirements.

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

During 2021, demand for advances declined due to the unprecedented level of liquidity injected by the Federal Reserve, excess deposits held by our members, alternative sources of wholesale funds available to our members, continued consolidation in the financial services industry involving our members, and the impacts of governmental relief efforts in response to the pandemic. We expect these factors to continue to dampen demand for advances in 2022. In addition, we expect the consummation of the merger of Flagstar Bank, historically one of our largest and most active borrowers, into a non-member depository institution, which is anticipated to result in repayment of their outstanding advances. As a result, we expect total advances outstanding to decline in 2022 by about 10%.

In spite of rising mortgage interest rates, we expect our mortgage loan balance outstanding to slightly increase in 2022 due to continuing strong demand by our members to participate in our Advantage MPP and lower levels of prepayments.

The merger of Flagstar Bank is expected to reduce the amount of liquidity we need to maintain. However, we expect to continue to maintain relatively high levels of liquidity to be able to timely support our members' needs.

We continue to seek to maintain investments in MBS up to 300% of total regulatory capital. Other long-term investments, such as Agency debentures, are likely to decline.

Access to debt markets has been reliable, while the cost of our consolidated obligations decreased significantly in 2021, compared to 2020. Going forward, we expect the cost to increase, with the extent of the increase dependent upon several factors, including the direction and level of market interest rates, competition from other issuers of Agency debt, changes in the investment references of potential buyers of Agency debt securities, global demand, pricing in the interest-rate swap market, and other technical market factors. As LIBOR continues to phase out, our adjustable-rate funding continues to be replaced by SOFR-indexed CO bonds.

Overall interest spreads were higher in 2021, compared to 2020, and are expected to increase in 2022, in spite of the expected increase in funding costs. Advance and investment spreads are expected to be flat while mortgage-related spreads are expected to widen due to anticipated lower amortization of purchase premiums resulting from lower prepayments. 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.

In light of our inherently low interest margins as a cooperative, we continue to strive to keep our operating expense ratios relatively low while we resume many pandemic-restricted business activities and continue to invest in technology to enhance our operating systems and member service capabilities. As a result, we expect a moderate increase in our operating expenses in 2022.

As a result of all of the foregoing factors, we have forecasted net income in 2022 to be slightly lower than net income in 2021.

Our board of directors seeks to reward our members with a competitive, risk-adjusted return on their investment, particularly those who actively utilize our products and services. On February 22, 2022, our board of directors declared a cash dividend on Class B-2 activity-based stock at an annualized rate of 3.25% and on Class B-1 non-activity-based stock at an annualized rate of 1.00%, resulting in a spread between the rates of 2.25 percentage points. The overall weighted-average annualized rate paid was 2.31%. While the overall dividend rate in 2022 will depend on many factors, we expect the board to continue to 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 strength of the housing markets and the level and volatility of market interest rates 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, 2021 and 2020.

Net Interest Income. Net interest income, which is primarily the interest income on advances, mortgage loans held for portfolio, short-term investments, and investment securities less the interest expense on consolidated obligations and interest-bearing deposits, is our primary source of earnings.

The decrease in net interest income for the year ended December 31, 2021 compared to the prior year was primarily due to lower earnings on the portion of the Bank's assets funded by its capital and the decline in average asset balances, partially offset by lower amortization of mortgage purchase premiums resulting from lower prepayments on mortgage loans and net hedging gains on qualifying fair-value hedging relationships.

For the hedging relationships that qualified for hedge accounting, the differences between those changes in fair value (i.e. hedge ineffectiveness) are recorded in net interest income and resulted in net hedging gains of $8 million for the year ended December 31, 2021, compared to net hedging losses of $12 million for the year ended December 31, 2020. The gains and losses for the years ended December 31, 2021 and 2020 were primarily due to marginal mismatches in durations on, and the increase in volume of, swapped GSE MBS, particularly Fannie Mae Delegated Underwriting and Servicing ("DUS"). As a result of issuing floating-rate consolidated obligations to fund these MBS purchases instead of swapped fixed-rate consolidated obligations, our funding and operational costs were reduced, but there was less offsetting hedge ineffectiveness, resulting in higher unrealized hedging gains or losses. However, to mitigate the volatility, during 2020 we began implementing a strategy of terminating certain interest-rate swaps associated with the MBS DUS and entering into hedging relationships with new interest-rate swaps, a strategy we continued in 2021.

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,								
	2021			2020			2019		
	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:									
Federal funds sold and securities purchased under agreements to resell	$ 7,026	$ 5	0.06 %	$ 5,716	$ 23	0.39 %	$ 6,246	$ 141	2.26 %
Investment securities [2]	19,264	180	0.93 %	19,984	265	1.32 %	16,465	419	2.54 %
Advances [3]	28,609	115	0.40 %	32,919	329	1.00 %	31,969	813	2.54 %
Mortgage loans held for portfolio [3][4]	7,852	169	2.15 %	9,927	231	2.33 %	11,252	358	3.17 %
Other assets (interest-earning) [5]	734	1	0.07 %	1,470	5	0.38 %	1,091	22	2.02 %
Total interest-earning assets	63,485	470	0.74 %	70,016	853	1.22 %	67,023	1,753	2.62 %
Other assets [6]	612			(22)			179		
Total assets	$ 64,097			$ 69,994			$ 67,202		
Liabilities and Capital:									
Interest-bearing deposits	$ 1,609	—	0.01 %	$ 1,384	2	0.21 %	$ 673	13	1.92 %
Discount notes	15,012	9	0.06 %	22,868	117	0.51 %	19,392	440	2.27 %
CO bonds [3]	43,033	206	0.48 %	41,105	462	1.12 %	42,994	1,050	2.44 %
MRCS	174	3	1.49 %	290	9	2.96 %	236	12	5.02 %
Other borrowings	—	—	— %	—	—	— %	2	—	2.28 %
Total interest-bearing liabilities	59,828	218	0.36 %	65,647	590	0.90 %	63,297	1,515	2.39 %
Other liabilities	708			1,052			790		
Total capital	3,561			3,295			3,115		
Total liabilities and capital	$ 64,097			$ 69,994			$ 67,202		
Net interest income		$ 252			$ 263			$ 238	
Net spread on interest-earning assets less interest-bearing liabilities			0.38 %			0.32 %			0.23 %
Net interest margin [7]			0.40 %			0.38 %			0.35 %
Average interest-earning assets to interest-bearing liabilities	1.06			1.07			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) Consists of trading, AFS and HTM securities. 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. Interest income/expense and average yield/cost of funds include all other components of interest, including the impact of net interest payments or receipts on derivatives in qualifying hedging relationships and amortization of hedge accounting basis adjustments. Excludes net interest payments or receipts on derivatives in economic hedging relationships.

(3) Interest income/expense and average yield/cost of funds include all other 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.

(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 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,		
	2021 vs. 2020		
Components	**Volume**	**Rate**	**Total**
Increase (decrease) in interest income:			
Federal funds sold and securities purchased under agreements to resell	$ 4	$ (22)	$ (18)
Investment securities	(6)	(79)	(85)
Advances	(38)	(176)	(214)
Mortgage loans held for portfolio	(46)	(16)	(62)
Other assets (interest-earning)	(2)	(2)	(4)
Total	(88)	(295)	(383)
Increase (decrease) in interest expense:			
Interest-bearing deposits	1	(3)	(2)
Discount notes	(30)	(78)	(108)
CO bonds	20	(276)	(256)
MRCS	(3)	(3)	(6)
Total	(12)	(360)	(372)
Increase (decrease) in net interest income	$ (76)	$ 65	$ (11)

Yields/Cost of Funds. The average yield on total interest-earning assets for the year ended December 31, 2021, including the impact of net hedging gains/losses but excluding certain impacts of trading securities, was 0.74%, a decrease of 48 bps compared to 2020, resulting primarily from decreases in market interest rates that led to lower yields on all of our interest-earning assets. The average cost of funds of total interest-bearing liabilities for the year ended December 31, 2021, including the impact of net hedging gains/losses but excluding certain impacts of trading securities, was 0.36%, a decrease of 54 bps due to lower funding costs on all of our interest-bearing liabilities. The net effect was an increase in the net interest spread of 6 bps to 0.38% for the year ended December 31, 2021 from 0.32% for the year ended December 31, 2020.

Average Balances. The average balances outstanding of interest-earning assets for the year ended December 31, 2021 decreased by 9% compared to the prior year. The average balances of advances and mortgage loans held for portfolio outstanding decreased by 13% and 21%, respectively, reflecting paydowns by our borrowers. The decrease in average interest-bearing liabilities for the year ended December 31, 2021, compared to the prior year, was due to a decrease in discount notes outstanding which reflected the reduced funding needs associated with the net decrease in average interest-earning assets. The average balances of total interest-earning assets, net of interest-bearing liabilities, decreased by 16%.

Provision for Credit Losses. The change in the provisions for (reversal of) credit losses for the year ended December 31, 2021 compared to the prior year was insignificant.

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

Components	Years Ended December 31, 2021	2020
Net realized gains from sale of available-for-sale securities	$ —	$ 1
Net unrealized gains (losses) on trading securities [1]	(15)	(37)
Net realized gains (losses) on trading securities [2]	(33)	23
Net gains (losses) on trading securities	(48)	(14)
Net gains (losses) on derivatives hedging trading securities	15	3
Net interest settlements on derivatives [3]	(9)	(47)
Net gains (losses) on other derivatives not designated as hedging instruments	(2)	(4)
Net gains (losses) on derivatives	4	(48)
Change in fair value of investments indirectly funding our SERP	6	3
Other, net	4	3
Total other income (loss)	$ (34)	$ (55)

(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) Generally offsetting interest income on trading securities is included in interest income.

The decrease in total other loss for the year ended December 31, 2021 compared to 2020 was due primarily to lower net interest settlements on the derivatives associated with trading securities, partially offset by higher net losses on trading securities, net of associated derivatives.

Net Gains (Losses) on Trading Securities. We purchase fixed-rate U.S. Treasury securities to enhance our liquidity. These 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.

The following table presents the net impact of these trading securities on income before assessments ($ amounts in millions).

Earnings Components of Trading Securities	Years Ended December 31, 2021	2020
Net interest income [1]	$ 46	$ 65
Other income:		
Net unrealized gains (losses)	(15)	(37)
Net realized gains (losses)	(33)	23
Net interest settlements on derivatives	(9)	(52)
Change in fair value of derivatives	15	3
Other income (loss), net	(42)	(63)
Net impact of trading securities on income before assessments	$ 4	$ 2

(1) Includes an estimate of associated interest expense.

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

Components	Years Ended December 31, 2021	2020
Compensation and benefits	$ 61	$ 61
Other operating expenses	30	32
Finance Agency and Office of Finance	12	10
Other	10	6
Total other expenses	$ 113	$ 109

The increase in total other expenses for the year ended December 31, 2021 compared to 2020 was due primarily to increases in our proportionate share of Finance Agency and Office of Finance costs and accelerated amortization of net actuarial loss due to settlements under our SERP.

The FHLBanks fund the costs of the Office of Finance as a joint office that facilitates issuing and servicing consolidated obligations, prepares the FHLBanks' combined quarterly and annual financial reports, and performs certain other functions. For the years ended December 31, 2021 and 2020, our assessments to fund the Office of Finance totaled $6 million and $5 million, respectively.

Each FHLBank is assessed a portion of the operating costs of our regulator, the Finance Agency. We have no direct control over these costs. For the years ended December 31, 2021 and 2020, our portion totaled $6 million and $5 million, respectively.

AHP Assessments. The FHLBanks are required to set aside annually, in the aggregate, the greater of $100 million or 10% of their 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 each of the years ended December 31, 2021 and 2020, our AHP expense was $11 million. Our AHP expense fluctuates in accordance with our net earnings.

Total Other Comprehensive Income (Loss). Total OCI for the year ended December 31, 2021 consisted substantially of gains under our SERP, due to a plan amendment and accelerated amortization of net actuarial loss to other expenses due to settlements, and net unrealized gains on AFS securities. Total OCI for the year ended December 31, 2020 consisted substantially of net unrealized gains on AFS securities, partially offset by net actuarial loss on our SERP. The unrealized gains on AFS securities primarily resulted from 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).

Traditional	Years Ended December 31, 2021	2020
Net interest income	$ 230	$ 254
Provision for (reversal of) credit losses	—	—
Other income (loss)	(33)	(52)
Other expenses	97	93
Income before assessments	100	109
AHP assessments	10	12
Net income	$ 90	$ 97

The decrease in net income for the traditional segment for the year ended December 31, 2021 compared to the prior year was substantially due to lower earnings on the portion of Bank's assets funded by its capital and lower net interest income resulting from the decline in average asset balances, partially offset by net hedging gains on qualifying fair-value hedging relationships.

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).

Mortgage Loans	Years Ended December 31, 2021	2020
Net interest income	$ 22	$ 9
Provision for (reversal of) credit losses	—	—
Other income (loss)	(1)	(3)
Other expenses	16	16
Income (loss) before assessments	5	(10)
AHP assessments (credit)	1	(1)
Net income (loss)	$ 4	$ (9)

The increase in net income for the mortgage loans segment for the year ended December 31, 2021 compared to the prior year was due to lower but still accelerated amortization of mortgage purchase premiums resulting from lower but still elevated MPP loan prepayments.

Analysis of Financial Condition

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

	December 31, 2021		December 31, 2020	
Major Asset Categories	**Carrying Value**	**% of Total**	**Carrying Value**	**% of Total**
Advances	$ 27,498	46 %	$ 31,347	48 %
Mortgage loans held for portfolio, net	7,616	13 %	8,516	13 %
Cash and short-term investments	7,048	12 %	5,627	9 %
Trading securities	3,947	7 %	5,095	8 %
Other investment securities	13,474	22 %	14,846	22 %
Other assets [1]	422	— %	494	— %
Total assets	$ 60,005	100 %	$ 65,925	100 %

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

Total assets as of December 31, 2021 were $60.0 billion, a decrease of $5.9 billion, or 9%, compared to December 31, 2020, primarily driven by net decreases in advances outstanding to members. The mix of our assets at December 31, 2021 changed compared to December 31, 2020 in that advances as a percent of total assets declined from 48% to 46% while cash and short-term investments increased from 9% to 12%, reflecting primarily the paydowns of short-term advances.

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, 2021, our growth in non-advance assets did not exceed 30%.

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, 2021 at carrying value totaled $27.5 billion, a net decrease of $3.8 billion, or 12%, compared to December 31, 2020. The unprecedented level of liquidity injected by the Federal Reserve, excess deposits held by our members, alternative sources of wholesale funds available to our members, continued consolidation in the financial services industry involving our members, and the impacts of governmental relief efforts in response to the COVID-19 pandemic continue to dampen overall demand for advances.

Our advances portfolio is well-diversified with advances to commercial banks and savings institutions, credit unions, and insurance companies. Advances to depository institutions, as a percent of total advances outstanding at par value, were 54% at December 31, 2021, while advances to insurance companies were 46%.

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

	December 31, 2021		December 31, 2020	
Borrower Type	**Par Value**	**% of Total**	**Par Value**	**% of Total**
Depository institutions:				
Commercial banks and saving institutions [1]	$ 12,199	45 %	$ 14,749	48 %
Credit unions	2,199	8 %	2,548	8 %
Former members - depositories	225	1 %	268	1 %
Total depository institutions	14,623	54 %	17,565	57 %
Insurance companies:				
Captive insurance companies [2]	263	1 %	288	1 %
Other insurance companies	12,419	45 %	12,832	42 %
Former members - insurance companies	5	— %	6	— %
Total insurance companies	12,687	46 %	13,126	43 %
CDFIs	—	— %	—	— %
Total advances outstanding	$ 27,310	100 %	$ 30,691	100 %

(1) Includes advances outstanding at December 31, 2021 and 2020 of $3.0 billion, or 11%, and $4.6 billion, or 15%, of total advances outstanding, respectively, to Flagstar. The parent company of Flagstar announced a merger pursuant to which Flagstar would merge with a non-member depository. On the effective date of Flagstar's merger, any outstanding advances will be required to be repaid at their respective maturity dates. For more information on how this anticipated merger could negatively affect the Bank, see *Item 1A. Risk Factors - 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.*

(2) 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 Membership Rule, 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.

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, 2021		December 31, 2020	
	Par Value	**% of Total**	**Par Value**	**% of Total**
Fixed-rate:				
Without call or put options				
Due in 1 year or less	$ 7,670	29 %	$ 10,023	33 %
Due after 1 through 5 years	5,708	21 %	6,753	22 %
Due after 5 through 15 years	752	3 %	1,243	4 %
Thereafter	2	— %	2	— %
Total	14,132	53 %	18,021	59 %
Callable or prepayable				
Due in 1 year or less	—	— %	—	— %
Due after 1 through 5 years	2	— %	2	— %
Due after 5 through 15 years	5	— %	5	— %
Thereafter	—	— %	—	— %
Total	7	— %	7	— %
Putable				
Due in 1 year or less	—	— %	—	— %
Due after 1 through 5 years	2,289	8 %	1,700	6 %
Due after 5 through 15 years	5,747	21 %	5,552	18 %
Thereafter	—	— %	—	— %
Total	8,036	29 %	7,252	24 %
Other [1]				
Due in 1 year or less	50	— %	32	— %
Due after 1 through 5 years	64	— %	102	— %
Due after 5 through 15 years	24	— %	34	— %
Thereafter	3	— %	4	— %
Total	141	— %	172	— %
Total fixed-rate	22,316	82 %	25,452	83 %
Variable-rate:				
Without call or put options				
Due in 1 year or less	18	— %	24	— %
Due after 1 through 5 years	167	1 %	—	— %
Due after 5 through 15 years	—	— %	—	— %
Thereafter	—	— %	—	— %
Total	185	1 %	24	— %
Callable or prepayable				
Due in 1 year or less	126	— %	36	— %
Due after 1 through 5 years	2,831	10 %	3,099	11 %
Due after 5 through 15 years	1,297	5 %	1,380	4 %
Thereafter	555	2 %	700	2 %
Total	4,809	17 %	5,215	17 %
Total variable-rate	4,994	18 %	5,239	17 %
Total advances	$ 27,310	100 %	$ 30,691	100 %

[1] Includes fixed-rate amortizing/mortgage matched advances.

Advances due in one year or less, as a percentage of the total outstanding at par, decreased from 33% at December 31, 2020 to 29% at December 31, 2021. See *Notes to Financial Statements - Note 5 - Advances.*

Mortgage Loans Held for Portfolio. We purchase 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, 2021, at carrying value, totaled $7.6 billion, a net decrease of $900 million, or 11%, from December 31, 2020, as principal repayments by borrowers significantly outpaced the Bank's purchases from its members. For the year ended December 31, 2021, purchases of mortgage loans under Advantage MPP totaled $2.2 billion, while MPP and MPF program repayments totaled $2.8 billion. In addition to low interest rates, Federal Reserve purchases of Fannie Mae and Freddie Mac MBS encouraged refinancing activity by borrowers.

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

	December 31, 2021		December 31, 2020	
Product Type	**UPB**	**% of Total**	**UPB**	**% of Total**
MPP:				
Conventional Advantage	$ 6,875	93 %	$ 7,529	90 %
Conventional Original	300	4 %	417	5 %
FHA	155	2 %	218	3 %
Total MPP	7,330	99 %	8,164	98 %
MPF Program:				
Conventional	79	1 %	123	2 %
Government	25	— %	36	— %
Total MPF Program	104	1 %	159	2 %
Total mortgage loans held for portfolio	$ 7,434	100 %	$ 8,323	100 %

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

Redemption Term	December 31, 2021	December 31, 2020
Due in 1 year or less	$ 288	$ 311
Due after 1 through 5 years	1,216	1,317
Due after 5 through 15 years	2,990	3,361
Thereafter	2,940	3,334
Total UPB	7,434	8,323
Other adjustments [1]	182	193
Total mortgage loans held for portfolio	7,616	8,516
Allowance for credit losses	—	—
Mortgage loans held for portfolio, net	$ 7,616	$ 8,516

[1] Consists of premiums, discounts and hedging adjustments.

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, 2021	December 31, 2020
MPP expected losses remaining after borrower's equity, before credit enhancements	$ 2.4	$ 10.3
Portion of expected losses recoverable from credit enhancements:		
PMI	(0.5)	(2.3)
LRA [(1)]	(1.3)	(6.8)
SMI	(0.4)	(1.0)
Total portion recoverable from credit enhancements	(2.2)	(10.1)
Allowance for unrecoverable PMI/SMI	—	—
Allowance for MPP credit losses	0.2	0.2
Allowance for MPF Program credit losses	0.1	0.1
Allowance for credit losses	$ 0.3	$ 0.3

(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.

Consistent with other lenders in the mortgage loan industry, we developed a loan forbearance program for our MPP in response to the COVID-19 pandemic. Under the forbearance program, our servicers could agree to reduce or suspend the borrower's monthly payments for a specified period. We issued additional guidelines to provide delegated authority to our servicers so they could extend forbearance periods and establish qualified forbearance resolution plans within our established parameters. We also authorized the suspension of foreclosure sales (with certain exceptions) through July 31, 2021, suspension of evictions through September 30, 2021 and, for borrowers under loss mitigation agreements related to the COVID-19 pandemic, the suspension of any negative credit reporting and the waiver of late fees. Beginning January 1, 2022, forbearances are still available but servicers are required to seek our approval on a case by case basis.

All qualifying COVID-19-related loan modifications considered to be formal, i.e. the legal terms of the loan were changed, are excluded from TDR classification and existing accounting policies and the loans are returned to current status upon modification. As of December 31, 2021 and 2020, the UPB of conventional loans with formal COVID-19-related modifications totaled $30 million, or 0.4%, and $12 million, or 0.2%, respectively, of our total conventional loans outstanding.

We have continued to apply our existing accounting policies for past due, non-accrual, and charge-offs resulting from COVID-19-related loan modifications considered to be informal, i.e. the legal terms of the loan were not changed. Based on information from our mortgage servicers, as of December 31, 2021 and 2020, the UPB of conventional loans in an informal forbearance arrangement totaled $21 million and $112 million, respectively, or 0.3% and 1.4%, respectively, of our total conventional loans outstanding. As of December 31, 2021, no informal COVID-19-related loan modifications were classified as TDRs. For more information on informal and formal forbearances, see *Notes to Financial Statements - Note 1 - Summary of Significant Accounting Policies*.

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 REO any foreclosed properties collateralizing MPP loans that were previously recorded on the statement of condition.

As the servicer progresses through the process from foreclosure to liquidation, the Bank is paid in full and the servicer files a claim against the various credit enhancements for reimbursement of losses incurred. The claim is then reviewed and paid as appropriate under the various credit enhancement policies or guidelines. At December 31, 2021, principal previously paid in full by our MPP servicers totaling less than $1 million remains subject to potential claims by those servicers for any losses resulting from past or future liquidations of the underlying properties. An estimate of the losses is included in the MPP allowance for credit losses.

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.

Cash and Investments. We maintain our investment portfolio for liquidity purposes, to use balance sheet capacity and to supplement our earnings. The earnings on our investments bolster our capacity to meet our commitments to affordable housing and community investments and to cover operating expenses. The following table presents a comparison of the components of our cash and investments at carrying value ($ amounts in millions).

Components	**December 31, 2021**	**December 31, 2020**
Cash and short-term investments:		
Cash and due from banks	$ 868	$ 1,812
Interest-bearing deposits	100	100
Securities purchased under agreements to resell	3,500	2,500
Federal funds sold	2,580	1,215
Total cash and short-term investments	7,048	5,627
Trading securities:		
U.S. Treasury obligations	3,947	5,095
Total trading securities	3,947	5,095
Other investment securities:		
AFS securities:		
GSE and TVA debentures	2,697	3,503
GSE multifamily MBS	6,463	6,642
Total AFS securities	9,160	10,145
HTM securities:		
Other U.S. obligations single-family MBS	2,626	2,623
GSE single-family MBS	816	1,196
GSE multifamily MBS	872	882
Total HTM securities	4,314	4,701
Total investment securities	17,421	19,941
Total cash and investments, carrying value	$ 24,469	$ 25,568

Cash and Short-Term Investments. Cash and short-term investments at December 31, 2021 totaled $7.0 billion, an increase of $1.4 billion, or 25%, from December 31, 2020. Cash and short-term investments as a percent of total assets at December 31, 2021 and December 31, 2020 totaled 12% and 9%, respectively. The total outstanding balance and composition of our short-term 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.

Trading Securities. The Bank purchases U.S. Treasury securities as trading securities to enhance its liquidity. Such securities outstanding at December 31, 2021 totaled $3.9 billion, a decrease of $1.1 billion, or 23%, from December 31, 2020. As a result, the liquidity portfolio at December 31, 2021 totaled $10.9 billion, an increase of $273 million, or 3%, from December 31, 2020.

Other Investment Securities. AFS securities at December 31, 2021 totaled $9.2 billion, a net decrease of $1.0 billion, or 10%, from December 31, 2020. The decrease resulted primarily from maturities of GSE debentures exceeding purchases of MBS.

Net unrealized gains on AFS securities at December 31, 2021 totaled $152 million, a net increase of $15 million compared to December 31, 2020, primarily due to changes in interest rates, credit spreads and volatility.

HTM securities at December 31, 2021 totaled $4.3 billion, a net decrease of $387 million, or 8%, from December 31, 2020. The decrease was due to repayments of HTM securities exceeding purchases.

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

Interest-Rate Payment Terms	December 31, 2021 Estimated Fair Value	December 31, 2021 % of Total	December 31, 2020 Estimated Fair Value	December 31, 2020 % of Total
Trading Securities:				
U.S. Treasury obligations fixed-rate	$ 3,947	100 %	$ 5,095	100 %
Total trading securities	$ 3,947	100 %	$ 5,095	100 %
	Amortized Cost	**% of Total**	**Amortized Cost**	**% of Total**
AFS Securities [(1)]:				
Total non-MBS fixed-rate	$ 2,652	29 %	$ 3,463	35 %
Total MBS fixed-rate	6,356	71 %	6,545	65 %
Total AFS securities	$ 9,008	100 %	$ 10,008	100 %
HTM Securities:				
MBS:				
Fixed-rate	$ 218	5 %	$ 283	6 %
Variable-rate	4,096	95 %	4,418	94 %
Total MBS	4,314	100 %	4,701	100 %
Total HTM securities	$ 4,314	100 %	$ 4,701	100 %
AFS and HTM securities:				
Total fixed-rate	$ 9,226	69 %	$ 10,291	70 %
Total variable-rate	4,096	31 %	4,418	30 %
Total AFS and HTM securities	$ 13,322	100 %	$ 14,709	100 %

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

The mix of fixed- vs. variable-rate AFS and HTM securities at December 31, 2021 changed slightly from December 31, 2020, primarily due to principal payments on fixed-rate MBS. However, all of the fixed-rate AFS securities are swapped to effectively create variable-rate securities, consistent with our balance sheet strategies to manage interest-rate risk.

Investments by Year of Redemption. The following table provides, by year of redemption, carrying values and yields for AFS and HTM securities as of December 31, 2021 ($ 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:					
GSE and TVA debentures	$ 582	$ 1,524	$ 591	$ —	$ 2,697
GSE MBS [1]	—	1,049	5,280	134	6,463
Total AFS securities	582	2,573	5,871	134	9,160
HTM Securities:					
Other U.S. obligations - guaranteed MBS [1]	—	—	—	2,626	2,626
GSE MBS [1]	—	20	461	1,207	1,688
Total HTM securities	—	20	461	3,833	4,314
Total AFS and HTM securities, carrying value	$ 582	$ 2,593	$ 6,332	$ 3,967	$ 13,474
Yield on AFS securities [2]	2.05 %	2.36 %	2.64 %	1.71 %	
Yield on HTM securities [2]	— %	0.54 %	0.42 %	0.91 %	

(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, 2021, based on contractual maturities, AFS and HTM securities due in one year or less were 5%, due after one year through five years were 19%, due after 5 years through 10 years were 47%, and due after 10 years were 29%.

Total Liabilities. Total liabilities at December 31, 2021 were $56.4 billion, a net decrease of $6.0 billion, or 10%, from December 31, 2020, substantially due to a decrease in consolidated obligations.

Deposits (Liabilities). Total deposits at December 31, 2021 were $1.4 billion, a net decrease of $9 million, or 1%, from December 31, 2020. These deposits provide a relatively small portion of our funding. The balances of these accounts 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. We had no uninsured term deposits outstanding at December 31, 2021 or 2020. 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, 2021 and 2020.*

Consolidated Obligations. The overall balance of our consolidated obligations fluctuates in relation to our total assets and the availability of alternative sources of funds. The carrying value of consolidated obligations outstanding at December 31, 2021 totaled $54.5 billion, a net decrease of $5.5 billion, or 9%, from December 31, 2020, which reflected reduced funding needs associated with the net decrease 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 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. During 2021 and 2020, the Bank applied a variety of strategies to effectively manage the balance and structure of its consolidated obligations as market conditions and our asset levels changed.

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

	December 31, 2021		December 31, 2020	
By Term	**Par Value**	**% of Total**	**Par Value**	**% of Total**
Consolidated obligations due in 1 year or less:				
Discount notes	$ 12,118	22 %	$ 16,620	28 %
CO bonds	14,357	26 %	31,127	52 %
Total due in 1 year or less	26,475	48 %	47,747	80 %
Long-term CO bonds	28,193	52 %	12,119	20 %
Total consolidated obligations	$ 54,668	100 %	$ 59,866	100 %

The mix of our funding has changed significantly. The percentage of consolidated obligations due in 1 year or less decreased from 80% at December 31, 2020 to 48% at December 31, 2021 as we took advantage of market opportunities to replace maturing short-term debt with long-term callable debt at favorable terms. As a result, long-term CO bonds increased from 20% of total consolidation obligations at December 31, 2020 to 52% at December 31, 2021. We continue to seek to maintain a sufficient liquidity and funding balance between our financial assets and financial liabilities.

Additionally, the FHLBanks work collectively to manage FHLB System-wide liquidity and funding and jointly monitor System-wide refinancing risk. 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).

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, 2021 and 2020, we had derivative assets, net of collateral held or posted, including accrued interest, with estimated fair values of $220 million and $283 million, respectively, and derivative liabilities, net of collateral held or posted, including accrued interest, with estimated fair values of $12 million and $23 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, 2021	December 31, 2020
Advances	$ 21,084	$ 16,573
Investments	13,356	15,035
Mortgage loans	194	361
CO bonds	21,177	17,473
Discount notes	—	950
Total notional	$ 55,811	$ 50,392

The increase in the total notional amount during the year-ended December 31, 2021 of $5.4 billion, or 11%, was substantially due to an increase in derivatives hedging advances and CO bonds, driven primarily by market opportunities.

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

December 31, 2021	Advances	Investments	CO Bonds	Total
Cumulative fair-value hedging basis adjustments on hedged items	$ 179	$ 206	$ 248	$ 633
Estimated fair value of associated derivatives, net	(179)	116	(249)	(312)
Net cumulative fair-value hedging basis adjustments	$ —	$ 322	$ (1)	$ 321

The gains on both the cumulative basis adjustments on the hedged items and the estimated fair values of associated derivatives resulted from our strategy of terminating certain interest-rate swaps associated with the MBS DUS and entering into short-cut hedging relationships with new interest-rate swaps.

Total Capital. Total capital at December 31, 2021 was $3.6 billion, a net increase of $106 million, or 3%, from December 31, 2020, substantially due to net income and proceeds from the issuance of capital stock in connection with member advance activity, partially offset by cash dividends on, and redemptions/repurchases of, capital stock.

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

Components	December 31, 2021	December 31, 2020
Capital stock	63 %	64 %
Retained earnings	33 %	33 %
AOCI	4 %	3 %
Total GAAP capital	100 %	100 %

The changes in the components of GAAP capital at December 31, 2021 compared to December 31, 2020 were primarily due to redemptions/repurchases of capital stock.

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

Reconciliation	December 31, 2021	December 31, 2020
Total GAAP capital	$ 3,556	$ 3,450
Exclude: AOCI	(133)	(105)
Add: MRCS	50	251
Total regulatory capital	$ 3,473	$ 3,596

Liquidity and Capital Resources

Liquidity. We manage our liquidity in order to be able 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.

Our cash and short-term investments at December 31, 2021 totaled $7.0 billion. Our short-term investments generally consist of high-quality financial instruments, many of which mature overnight. Our trading securities at December 31, 2021 totaled $3.9 billion and consisted solely of U.S. Treasury securities. As a result, our liquidity portfolio at December 31, 2021 totaled $10.9 billion, or 18% of total assets. The level of our liquidity fluctuates and is influenced by regulatory requirements, actual and anticipated member advance activity and market conditions.

Historically, our status as a GSE and favorable credit ratings have provided us with excellent access to capital markets. 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, 2021, we maintained sufficient access to funding; our net proceeds from the issuance of consolidated obligations totaled $334.3 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.

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, 2021	December 31, 2020
Liquidity deposit reserves	$ 29,540	$ 33,574
Less: total deposits	1,366	1,375
Excess liquidity deposit reserves	$ 28,174	$ 32,199

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, 2021	December 31, 2020
Aggregate qualifying assets	$ 59,662	$ 65,532
Less: total consolidated obligations outstanding	54,478	59,950
Aggregate qualifying assets in excess of consolidated obligations	$ 5,184	$ 5,582
Ratio of aggregate qualifying assets to consolidated obligations	1.10	1.09

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 cash flows from our assets and liabilities support our mission to provide our members with competitively priced funding, a reasonable return on their investment in our capital stock, and support for community investment activities. 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, 2021 was $444 million, compared to net cash used in operating activities for the year ended December 31, 2020 of $318 million. The net increase in cash provided of $762 million 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. The following table provides a breakdown of our outstanding capital stock and MRCS ($ amounts in millions).

By Type of Member Institution	December 31, 2021 Amount	December 31, 2021 % of Total	December 31, 2020 Amount	December 31, 2020 % of Total
Capital Stock:				
Depository institutions:				
Commercial banks and savings institutions	$ 1,126	49 %	$ 1,108	45 %
Credit unions	309	13 %	298	12 %
Total depository institutions	1,435	62 %	1,406	57 %
Insurance companies	811	35 %	802	33 %
CDFIs	—	— %	—	— %
Total capital stock, putable at par value	2,246	97 %	2,208	90 %
MRCS:				
Captive insurance companies [(1)]	12	1 %	31	1 %
Other former members	38	2 %	220	9 %
Total MRCS	50	3 %	251	10 %
Total regulatory capital stock	$ 2,296	100 %	$ 2,459	100 %

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

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 excess capital stock ($ amounts in millions).

Components	December 31, 2021	December 31, 2020
Member capital stock not subject to outstanding redemption requests	$ 798	$ 605
Member capital stock subject to outstanding redemption requests	14	—
MRCS	28	225
Total excess capital stock	$ 840	$ 830
Excess stock as a percentage of regulatory capital stock	37 %	34 %

The increase in total excess stock during the year ended December 31, 2021 resulted from the net reduction in advances outstanding, substantially offset by repurchases of excess MRCS.

In September 2021, we repurchased $181 million par value of excess MRCS held by former members or their successors-in-interest. In addition, we repurchased $11.3 million par value of excess stock subject to outstanding repurchase requests.

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, 2021 was 5.79%. Excess stock must be repurchased under these circumstances only to the extent required to reduce the Bank's regulatory capital ratio to the specific ratio which was used to calculate the repurchase obligation, currently 5.75%. 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.

Our regulatory capital ratio exceeded 6.0% at January 31, 2022. As a result, to comply with our capital plan, we executed excess stock repurchases in February 2022 totaling $166.8 million.

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 capital 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 competitive, 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, overall financial performance and retained earnings, 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 our weighted-average dividend rate and dividend payout ratio.

	Years Ended December 31,		
	2021	2020	2019
Weighted-average dividend rate [(1)]	2.44 %	3.66 %	5.31 %
Dividend payout ratio [(2)]	57.67 %	86.97 %	73.13 %

(1) Dividends paid in cash during the year divided by the average amount of Class B stock eligible for dividends under our capital plan, excluding MRCS.
(2) Dividends paid in cash during the year divided by net income for the year.

On February 22, 2022, our board of directors declared a cash dividend on Class B-2 activity-based stock at an annualized rate of 3.25% and on Class B-1 non-activity-based stock at an annualized rate of 1.00%, resulting in a spread between the rates of 2.25 percentage points. The overall weighted-average annualized rate paid was 2.31%. The dividends were paid in cash on February 23, 2022. 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.*

Restricted Retained Earnings. In accordance with the JCE agreement, 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 previous 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 our average balance of outstanding consolidated obligations for the previous 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. We developed our Capital Markets Policy based on 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, 2021 and 2020 ($ amounts in millions).

Risk-Based Capital Components	December 31, 2021	December 31, 2020
Credit risk	$ 155	$ 158
Market risk	684	327
Operational risk	252	146
Total risk-based capital requirement	$ 1,091	$ 631
Permanent capital	$ 3,473	$ 3,596

The increase in our total risk-based capital requirement was primarily caused by an increase in the market risk component due to changes in the market environment, including changes in interest rates, CO bond-swap basis, volatility, option-adjusted spreads and balance sheet composition. The operational risk component is calculated as 30% of the credit and market risk components. Our permanent capital at December 31, 2021 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 estimates and assumptions have the potential to significantly affect our financial position and results of operations. In any given reporting period, our actual results may differ from the estimates and assumptions used in preparing our financial statements.

We consider two of our accounting policies and estimates to be critical because they require management to make particularly difficult, subjective, and/or complex judgments about matters that are inherently uncertain and because of the likelihood that materially different amounts could be reported under different conditions or using different assumptions. These accounting policies pertain to:

- Derivatives and hedging activities (for more information, see *Notes to Financial Statements - Note 8 - Derivatives and Hedging Activities*); and
- Fair value estimates (for more information, see *Notes to Financial Statements - Note 16 - Estimated Fair Values*).

We believe the application of our accounting policies on a consistent basis enables us to provide financial statement users with useful, reliable and timely information about our results of operations, financial position and cash flows.

Accounting for Derivatives and Hedging Activities. All derivatives are recorded on the statement of condition at their estimated fair values. Changes in the estimated fair value of derivatives are recorded in current period earnings. Therefore, even though derivatives are used 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.

The accounting guidance related to derivative accounting is complex and contains strict documentation requirements. The details of each designated hedging relationship must be formally documented at the inception of the arrangement, including the risk management objective, hedging strategy, hedged item, specific risk being hedged, the derivative instrument and how effectiveness is being assessed. 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.

Generally, we endeavor to use derivatives that qualify for fair-value hedge accounting. To qualify, the hedging instrument must be expected to be "highly effective" in offsetting changes in the fair value of the associated hedged item attributable to the hedged risk. A fair-value hedge relationship is considered highly effective only if certain specified criteria are met.

For hedging relationships that qualify for hedge accounting and are designated as fair-value hedges, the change in the fair value of the hedged item attributable to the hedged risk is recorded in current period earnings, thereby providing an offset to the change in fair value of the derivative. Any difference in the change in fair value of the derivative and the change in the fair value of the hedged item attributable to the hedged risk represents "hedge ineffectiveness". If a fair-value hedging relationship qualifies for the shortcut method of hedge accounting, the change in the fair value of the derivative is considered perfectly effective in offsetting the change in the fair value of the hedged item attributable to the hedged risk and, as a result, no ineffectiveness is recorded in earnings. To qualify for shortcut accounting treatment, a number of strict conditions must be met.

When applying the shortcut method, we document at hedge inception a quantitative method to assess hedge effectiveness if we would later determine its application was not or is no longer appropriate. By documenting a quantitative method at inception, the risk associated with inappropriately applying the shortcut method is reduced as the quantitative method can be applied, if certain qualifying criteria are met, without having to dedesignate the hedge relationship as of the date it was determined the hedge no longer qualified for the shortcut method.

Derivatives that are in fair-value hedging relationships but do not qualify for the shortcut method are accounted for using a long-haul method, either the total contractual coupon or benchmark component method. For more information on the long-haul methods and techniques used by the Bank, see *Notes to Financial Statements - Note 1 - Summary of Significant Accounting Policies.*

If a hedge fails the effectiveness test at inception, we do not apply hedge accounting. If the hedge fails the effectiveness test during the life of the relationship, we discontinue hedge accounting prospectively.

Although substantially all of our derivatives qualify for fair-value hedge accounting, we treat all derivatives that do not qualify as economic hedges for asset/liability management purposes.

The 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. As such, the use of these estimates can have a significant impact on current period earnings. Although 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 issue.

As of December 31, 2021, the Bank’s derivatives portfolio included $37.6 billion (notional amount) that was accounted for using a long-haul method, substantially the total contractual coupon method, $8.8 billion (notional amount) that was accounted for using the shortcut method, and $9.2 billion (notional amount) that did not qualify for hedge accounting. By comparison, at December 31, 2020, the Bank’s derivatives portfolio included $36.9 billion (notional amount) that was accounted for using the long-haul method, $3.3 billion (notional amount) that was accounted for using the shortcut method, and $10.2 billion (notional amount) that did not qualify for hedge accounting.

Fair Value Estimates. We report certain assets and liabilities on the statement of condition at estimated fair value, including investments classified as trading, AFS, grantor trust assets, and all derivatives. "Fair value" is defined as the price that would be received to sell an asset, or paid to transfer a liability, in an orderly transaction between market participants at the measurement date. We are required to consider factors specific to the asset or liability, the principal or most advantageous market for the asset or liability, and the participants with whom we would transact in that market. In general, the transaction price will equal the exit price and, therefore, represents the fair value of the asset or liability at initial recognition.

Estimated fair values are based on quoted market prices or market-based prices, if such prices are available. If quoted market prices or market-based prices are not available, estimated fair values are determined based on valuation models that use either:

- discounted cash flows, using market estimates of interest rates and volatility; or
- dealer prices on similar instruments.

For external valuation models, we review the vendors' valuation processes, methodologies, and control procedures for reasonableness. For internal valuation models, the underlying assumptions are based on management's best estimates for:

- discount rates;
- prepayments;
- market volatility; and
- other factors.

The assumptions used in both external and internal valuation models could have a significant effect on the reported fair values of assets and liabilities, including the related income and expense. The use of different assumptions, as well as changes in market conditions, could result in materially different values. We continue to refine our valuation methodologies as markets and products develop and the pricing for certain products becomes more or less transparent.

We categorize our financial instruments reported at estimated fair value into a three-level hierarchy. The valuation hierarchy is based upon the transparency (observable or unobservable) of inputs to the valuation of an asset or liability as of the measurement date. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect our market assumptions. Level 1 instruments are those for which inputs to the valuation methodology are observable and are derived from quoted prices (unadjusted) for identical assets or liabilities in active markets that we can access on the measurement date. Level 2 instruments are those for which inputs are observable, either directly or indirectly, and include quoted prices for similar assets and liabilities. Finally, level 3 instruments are those for which inputs are unobservable or are unable to be corroborated by external market data.

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.

Pandemic-Related Developments. Executive and legislative branches of the federal and state governments and their agencies have continued to take steps to provide relief in connection with the continuing COVID-19 pandemic. For example, on March 11, 2021, President Biden signed into law the American Rescue Plan Act of 2021, which provided an additional $1.9 trillion dollars for COVID-19 pandemic relief. Among other appropriations, the legislation allocated $7.25 billion in additional funds to support the Paycheck Protection Program ("PPP"). This legislation also expanded eligibility for the PPP to include certain nonprofit organizations and digital news services. Since the legislation did not expand the PPP application deadline beyond March 31, 2021, the PPP Extension Act of 2021 was signed into law on March 30, 2021, which extended the application deadline to May 31, 2021. As another example, on June 25, 2021, the Federal Reserve announced a final extension of its Paycheck Protection Program Liquidity Facility ("PPPLF") by an additional month to July 30, 2021. The PPPLF provides collateralized Paycheck Protection Program loan liquidity to eligible Federal Reserve member financial institutions to facilitate PPP loan originations at such financial institutions. The extension allowed additional processing time for banks, CDFIs, and other financial institutions to pledge to the facility any PPP loans approved by the SBA through the June 30, 2021 expiration of the PPP program. Additionally, the Federal Reserve continued to purchase agency securities throughout the year resulting in increased competition from Fannie Mae and Freddie Mac for purchases of mortgage loans via MPP.

These and other forms of pandemic-related relief have provided alternative sources of liquidity for members which has tended to reduce their needs for advances, which is reflected in the decline in advances balances we experienced during the year ended December 31, 2021. Pandemic-related relief may continue to suppress members' demand for advances if such relief continues to provide alternative sources of liquidity. Similarly, the increased competition from Fannie Mae and Freddie Mac facilitated by the Federal Reserve's purchases of agency securities has resulted in fewer opportunities for us to purchase mortgage loans from our members.

Executive and legislative branches of the federal and state governments and their agencies may take further steps to provide relief in connection with the continuing COVID-19 pandemic. While many relief programs and actions are temporary in nature, as with the existing relief efforts, they may have a direct or indirect impact on us or our members. Those impacts could, in turn, result in reduced demand for advances and/or heightened competition for mortgage loan purchases. We are unable to predict whether any such actions may be taken.

Other Legislative Developments.

Affordable Housing and Community Investment. Legislation has been introduced in the U.S. Senate and House of Representatives that, if enacted in its proposed form, would require us to set aside higher percentages of our earnings for our AHP than is currently required. As part of the subsequent congressional budget reconciliation process, a legislative proposal is under consideration that would require us to increase our contribution for our AHP to 15% of our earnings for the preceding year. We cannot predict whether legislation increasing our required contribution will be enacted and, if it is enacted, the amount of the increase or the period over which it would be increased. An increased required contribution to our AHP would result in less net income being available for other purposes.

Other Regulatory Developments.

FHLBank Membership Supervisory Letter. On September 9, 2021, the Finance Agency published a supervisory letter addressing certain FHLBank membership issues, including:

- requirements for de novo CDFIs;
- automatic transfer of membership;
- large non-member institutions merging with small member institutions;
- membership applicant's compliance with financial condition requirements, and
- the definition of insurance company.

The Finance Agency issued the letter to provide uniform guidance regarding these identified membership issues. The guidance could result in:

- fewer opportunities for FHLBank membership; and/or
- ineligibility for continued membership by certain entities, most notably CDFIs, insurance companies and large institutions that have acquired small members.

Accordingly, the guidance could result in reduced opportunities for us to grow our membership and, in turn, fewer opportunities to provide our financial services.

Regulatory Interpretation on Eligibility of Mortgage Participations as Collateral for FHLBank Advances. On October 4, 2021, the Finance Agency published a regulatory interpretation on the eligibility of mortgage loan participations as collateral for FHLBank advances, which interpretation became effective on December 13, 2021. The interpretation provides the Finance Agency's views on whether an FHLBank can accept mortgage loan participations as collateral to secure advances that cannot be readily liquidated in the form in which they are to be pledged. The interpretation rescinds prior guidance to the contrary and concludes that participations for which there would be a known impediment to liquidation are not eligible collateral for advances. The interpretation also provides that known impediments to liquidation include, among other possible reasons, instances when such participations:

- are not in salable form; and/or
- lack a viable secondary market.

We are evaluating the potential impact of the interpretation on the Bank, but it would lead to a decrease in the amount of collateral that is eligible to be pledged to us by our members.

Fair Housing and Fair Lending Enforcement. On July 9, 2021, the Finance Agency published a policy statement on fair lending to communicate the Finance Agency's general position on monitoring and information gathering, supervisory examinations, and administrative enforcement related to the Equal Credit Opportunity Act, the Fair Housing Act, and the Federal Housing Enterprises Financial Safety and Soundness Act. On August 12, 2021, the Finance Agency and the Department of Housing and Urban Development announced they had entered into a memorandum of understanding regarding fair housing and fair lending enforcement. Under the memorandum of understanding, the two agencies will focus on enhancing their enforcement of the Fair Housing Act, and their oversight of Fannie Mae, Freddie Mac, and the FHLBanks. We continue to monitor these actions and guidance as they evolve and to evaluate their potential impact.

Amendment to FINRA Rule 4210: Margining of Covered Agency Transactions. FINRA amended Rule 4210 delaying the effectiveness of margining requirements for covered agency transactions until April 26, 2022 (from the original effective date of January 26, 2022). On March 3, 2022, the SEC approved a further delay to the effectiveness of these margin requirements until October 26, 2022. Once the margining requirements are effective, we may be required to collateralize our transactions that are covered agency transactions, which include TBAs. These collateralization requirements could have the effect of reducing the overall profitability of engaging in covered agency transactions, including TBAs. Further, any collateralization requirements would expose us to credit risk from our counterparties to such transactions.

CFTC and Other Derivatives Developments. The Dodd-Frank Act mandated the U.S. federal regulation of the over-the-counter derivatives market and granted joint regulatory authority to the SEC and the CFTC over derivatives. The SEC and CFTC have completed most of their rules to implement the Dodd-Frank Act's requirements. Pursuant thereto, our derivatives operations have become subject to, among other things, recordkeeping, reporting and documentation requirements. In addition, certain non-cleared derivatives entered into as part of our derivatives operations have become subject to two-way variation margin requirements and may become subject to two-way initial margin requirements beginning in 2022. These margining requirements are expected to increase the cost and reduce the availability of non-cleared derivatives. Collectively, the Dodd-Frank Act requirements have increased the direct and indirect costs of our hedging and related activities and could increase them further in the future.

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 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.

The Finance Agency has established certain risk-related compliance requirements. In addition, 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 incorporates high level qualitative and quantitative risk limits and tolerances from our Enterprise Risk Management Policy, which serves as a key policy to address our exposures to market, credit, liquidity, operational and business risks, and from various other key risk-related policies approved by our board of directors, including the Operational Risk Management Policy, the Model Risk Management Policy, the Credit Policy, the Capital Markets Policy, and the Enterprise Information Security Policy.

Effective risk management programs include not only conformance of specific risk management practices to the Enterprise Risk Management Policy and other key risk-related policy requirements, but also the active involvement of our board of directors. Our board of directors has established a Risk Oversight Committee that provides focus, direction and accountability for our risk management process. Further, pursuant to the Enterprise Risk Management Policy, the following internal management committees focus on risk management, among other duties:

- Executive Management Committee
    - Facilitates planning, coordination and communication among our operating divisions and the other committees;
    - Focuses on leadership, collaboration and our resources to best serve organizational priorities; and
    - Generally oversees the following committees' activities.
        - Member Services Committee
            - Focuses on new and existing member services and products and oversees the effectiveness of the risk mitigation framework for member services and products; and
            - Promotes cross-functional communication and exchange of ideas pertaining to member products offered to achieve financial objectives established by the board of directors and senior management while remaining within prescribed risk parameters.
        - Capital Markets Committee
            - Focuses on our investment, hedging, and funding activities as they relate to financial performance, risk profile and our strategic direction; and
            - Deliberates proposed strategies to meet funding needs and achieve financial performance objectives established by the board of directors and senior management, while remaining within established risk control parameters.
        - IT Steering Committee
            - Monitors our technology-related activities, strategies, risk positions and issues; and
            - Promotes cross-functional communication and exchange of ideas pertaining to the technology directions and actions undertaken to achieve our strategic and financial objectives.
- Risk Committee
    - 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; 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.
- Asset Liability Committee
    - Evaluates the impact of macro-economic, interest rate and financial market conditions on the Bank's financial performance and capital levels; and
    - Determines enterprise-level asset-liability management strategies.

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

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 through actual or implied contractual agreements. 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 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, 2021 and 2020, advances outstanding to our insurance company members represented 46% and 43%, respectively, of our total advances outstanding, at par. We believe that advances outstanding to our insurance company members and the relative percentage of their advances to the total could increase, based upon the significant portion of total financial assets held by insurance companies in our district. Although insurance companies represent growth opportunities for our credit products, they 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, 2021, 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 (excluding captive insurance companies) is 25% of their total general account assets. As of December 31, 2021, 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 restricted assets. As of December 31, 2021, we had no advances outstanding to a non-depository CDFI member whose total credit products exceeded 25% of their total unrestricted assets.

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, 2021, our top borrower held 12% of total advances outstanding, at par, and our top five borrowers held 43% 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, 2021	**Advances Outstanding**	**% of Total**
The Lincoln National Life Insurance Company	$ 3,130	12 %
Flagstar Bank, FSB	3,000	11 %
Jackson National Life Insurance Company	2,017	7 %
Old National Bank	1,903	7 %
Forethought Life Insurance Company	1,592	6 %
Subtotal - five largest borrowers	11,642	43 %
Next five largest borrowers	5,511	20 %
Others	10,157	37 %
Total advances, par value	$ 27,310	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, 2021, 2020, and 2019, 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.

The assets that constitute eligible collateral to secure extensions of credit are set forth in Section 10(a) of the Bank Act. 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
- ORERC 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 credit services 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, 2021. 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**	**ORERC/ CFI**	**Securities/ Delivery**	**Total Collateral**	**Lendable Value [1]**	**Credit Outstanding [2]**
Blanket	72	$ 9,614	$ 7,719	$ 1,849	$ 19,182	$ 12,926	$ 5,713
Specific listings	60	21,981	4,607	3,982	30,570	23,714	7,639
Possession	26	6,066	12,314	6,778	25,158	18,091	12,950
Hybrid [3]	4	3,820	1,389	302	5,511	3,503	1,420
Total	162	$ 41,481	$ 26,029	$ 12,911	$ 80,421	$ 58,234	$ 27,722

(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.

Credit services 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 institution 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 these institutions.

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, 2021, 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, 2021	**AA**	**A**	**Total**
Domestic	$ —	$ 100	$ 100
Australia	910	—	910
Canada	—	1,170	1,170
Netherlands	—	500	500
Total unsecured credit exposure	$ 910	$ 1,770	$ 2,680

Trading Securities. Our liquidity portfolio includes U.S. Treasury securities, 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), 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 these investments near the 300% limit in order to enhance earnings and capital for our members and diversify our revenue stream. However, when our ratio exceeds 300%, as it did on December 31, 2021, the opportunity to further enhance our earnings will not be available until we are again permitted to purchase these investments.

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 or investment. Amounts reported do not reflect any subsequent changes in ratings, outlook, or watch status ($ amounts in millions).

December 31, 2021	**AA**	**A**	**Total**
Short-term investments:			
Interest-bearing deposits	$ —	$ 100	$ 100
Securities purchased under agreements to resell	3,500	—	3,500
Federal funds sold	910	1,670	2,580
Total short-term investments	4,410	1,770	6,180
Trading securities:			
U.S. Treasury obligations	3,947	—	3,947
Total trading securities	3,947	—	3,947
Other investment securities:			
GSE and TVA debentures	2,697	—	2,697
GSE MBS	8,150	—	8,150
Other U.S. obligations - guaranteed RMBS	2,626	—	2,626
Total other investment securities	13,473	—	13,473
Total investments, carrying value	$ 21,830	$ 1,770	$ 23,600
Percentage of total	93 %	7 %	100 %

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, 2021, we had PMI coverage on $695 million or 10% of our conventional MPP mortgage loans, which included coverage of $1.4 million on seriously delinquent loans, i.e., 90 days or more past due or in the process of foreclosure, of $4.7 million.

LRA. We use either a "spread LRA" or a "fixed LRA" for credit enhancement. The spread LRA was used in combination with SMI for credit enhancement of conventional mortgage loans purchased under our original MPP, and the fixed LRA is used for credit enhancement of conventional mortgage loans purchased under Advantage MPP. At this time, substantially all of the additions are from Advantage MPP, and substantially all of the claims paid are from the original MPP.

The following table presents the changes in the LRA for original MPP and Advantage MPP ($ amounts in millions).

	2021		
LRA Activity	**Original**	**Advantage**	**Total**
Liability, beginning of year	$ 4	$ 203	$ 207
Additions	—	25	25
Claims paid	—	—	—
Distributions to PFIs	—	(1)	(1)
Liability, end of year	$ 4	$ 227	$ 231

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, 2021, we were the beneficiary of SMI coverage, under our original MPP, on conventional mortgage pools with a total UPB of $300 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+ for Mortgage Guaranty Insurance Corporation and BB for Enact Mortgage Insurance. 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, 2021				
		% 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	$ 2	79.3 %	7.7 %	2.0 %	11.0 %
620-659	31	88.9 %	3.8 %	1.6 %	5.7 %
660-699	582	97.7 %	0.8 %	0.3 %	1.2 %
700-739	1,507	98.4 %	0.7 %	0.1 %	0.8 %
740 or higher	5,132	99.6 %	0.2 %	— %	0.2 %
Total	$ 7,254	99.1 %	0.4 %	0.1 %	0.4 %

(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, 2021, 100% 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, 2021
< = 60%	18 %
> 60% to 70%	17 %
> 70% to 80%	51 %
> 80% to 90% [2]	10 %
> 90% [2]	4 %
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, 2021, 86% of the borrowers had an LTV ratio of 80% or lower at origination and the weighted average LTV ratio at origination was 72%.

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

Mortgage Loan Concentration. During 2021, our top-selling PFI sold us mortgage loans totaling $218 million, or 10% of the total mortgage loans that we purchased in 2021. Our five top-selling PFIs sold us 28% 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, 2021, 2020, and 2019, 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, 2021 for the five largest state concentrations.

By State	December 31, 2021
Indiana	48 %
Michigan	31 %
California	4 %
Florida	1 %
Kentucky	1 %
All others	15 %
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,	
	2021	2020
Average loans outstanding during the year ended (UPB)	$ 7,665	$ 9,708
Mortgage loans held for portfolio (UPB)	7,434	8,323
Non-accrual loans (UPB) [1]	23	86
Allowance for credit losses on mortgage loans held for portfolio	(0.2)	(0.4)
Net charge-offs	—	—
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	0.31 %	1.04 %
Ratio of allowance for credit losses to non-accrual loans	0.85 %	0.40 %

(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). At December 31, 2021, the total UPB of our non-accrual loans in informal, COVID-19-related forbearance was $7 million.

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

The serious delinquency rate for government-guaranteed or -insured mortgages was 0.86% at December 31, 2021, compared to 3.36% at December 31, 2020. 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. The serious delinquency rate for conventional mortgages was 0.40% at December 31, 2021, compared to 1.14% at December 31, 2020. Both rates were below the national serious delinquency rate.

Although 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), the magnitude of the declines in home prices and increases in the time to complete foreclosures in past years resulted in losses in some of the mortgage pools that have exhausted the LRA; however, credit enhancement support is still available through the SMI coverage.

Derivatives. Our over-the-counter derivative transactions are either (i) held 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, 2021	**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	$ 2	$ —	$ —	$ —
Cleared derivatives [1]	7,401	—	49	49
Liability positions with credit exposure				
Uncleared derivatives - A	1,311	(11)	11	—
Cleared derivatives [1]	15,287	—	171	171
Total derivative positions with credit exposure to non-member counterparties	24,001	(11)	231	220
Total derivative positions with credit exposure to member institutions [2]	48	—	—	—
Subtotal - derivative positions with credit exposure	24,049	$ (11)	$ 231	$ 220
Derivative positions without credit exposure	31,762			
Total derivative positions	$ 55,811			

[1] Represents derivative transactions cleared by two clearinghouses (one rated AA- and the other unrated). The net exposure to one such clearinghouse rated AA- is $216 million. The net exposure to the other clearinghouse which is unrated is $4 million.

[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 and Capital Resources - 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 program 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.

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 profitability 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. 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 and LIBOR yield curves);
- 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., advance, investment or derivative) 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 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, 2021	$ 684	$ 684	$ 384	$ 526
December 31, 2020	327	327	230	279

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 the LIBOR curve, the OIS curve or 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, 2021	Down 200 (1)	Down 100 (1)	Base	Up 100	Up 200
MVE	$ 3,599	$ 3,485	$ 3,530	$ 3,556	$ 3,543
Percent change in MVE from base	2.0 %	(1.3)%	0 %	0.7 %	0.4 %
MVE/book value of equity	99.8 %	96.6 %	97.9 %	98.6 %	98.2 %
Duration of equity	0.9	1.7	(1.3)	(0.1)	0.6
December 31, 2020	**Down 200 (2)**	**Down 100 (1)**	**Base**	**Up 100**	**Up 200**
MVE	$ 3,621	$ 3,605	$ 3,559	$ 3,579	$ 3,590
Percent change in MVE from base	1.8 %	1.3 %	0 %	0.6 %	0.9 %
MVE/book value of equity	97.8 %	97.4 %	96.2 %	96.7 %	97.0 %
Duration of equity	—	0.8	0.7	(0.7)	0.4

(1) Given the low interest rates in the short-to-medium term points of the yield curves, downward rate shocks are constrained to prevent rates from becoming negative. During periods of extremely low interest rates, the Finance Agency requires that FHLBanks employ a constrained down-shock analysis to limit the evolution of forward interest rates to positive non-zero values. Since our market risk model imposes a positive non-zero boundary on post-shock interest rates, no additional calculations are necessary in order to meet this Finance Agency requirement when applicable.

The changes in those key metrics from December 31, 2020 resulted primarily from the change in market value of the Bank's assets and liabilities in response to changes in the market environment, changes in portfolio composition, upgrading the prepayment model 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, 2021 and 2020 was (0.11)% and 0.01% , 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, 2021	December 31, 2020
Advances:				
Pay fixed, receive floating interest-rate swap (without options)	Converts the advance's fixed rate to a variable-rate index.	Fair-value	$ 9,252	$ 9,315
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	7,982	7,258
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	3,850	—
Sub-total advances			21,084	16,573
Investments:				
Pay fixed, receive floating interest-rate swap	Converts the investment's fixed rate to a variable-rate index.	Fair-value	4,181	4,992
		Economic	3,950	5,050
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	4,599	4,367
Interest-rate cap	Offsets the interest-rate cap embedded in a variable-rate investment.	Economic	626	626
Sub-total investments			13,356	15,035
Mortgage loans:				
Forward settlement agreement	Protects against changes in market value of fixed-rate MDCs resulting from changes in interest rates.	Economic	98	181
Sub-total mortgage loans			98	181
CO bonds:				
Receive fixed, pay floating interest-rate swap (without options)	Converts the bond's fixed rate to a variable-rate index.	Fair-value	1,041	11,018
		Economic	200	—
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	19,341	3,278
Receive float, pay float basis swap	Reduces interest-rate sensitivity and repricing gaps by converting the bond's variable rate to a different variable-rate index.	Economic	595	3,177
Sub-total CO bonds			21,177	17,473
Discount notes:				
Receive fixed, pay floating interest-rate swap	Converts the discount note's fixed rate to a variable-rate index.	Economic	—	950
Sub-total discount notes			—	950
Stand-alone derivatives:				
MDCs	Not Applicable	N/A	96	180
Sub-total stand-alone derivatives			96	180
Total notional			$ 55,811	$ 50,392

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, 2021			December 31, 2020		
Interest-Rate Payment Terms	**Total Outstanding**	**Amount Swapped**	**% Swapped**	**Total Outstanding**	**Amount Swapped**	**% Swapped**
Trading securities:						
Total fixed-rate	$ 3,947	$ 3,947	100 %	$ 5,095	$ 5,095	100 %
Total trading securities, fair value	$ 3,947	$ 3,947	100 %	$ 5,095	$ 5,095	100 %
AFS securities:						
Total fixed-rate	$ 9,008	$ 9,008	100 %	$ 10,008	$ 10,008	100 %
Total AFS securities, amortized cost	$ 9,008	$ 9,008	100 %	$ 10,008	$ 10,008	100 %
Advances:						
Total fixed-rate	$ 22,316	$ 17,234	77 %	$ 25,452	$ 16,573	65 %
Total variable-rate	4,994	3,850	77 %	5,239	—	— %
Total advances, par value	$ 27,310	$ 21,084	77 %	$ 30,691	$ 16,573	54 %
CO bonds:						
Total fixed-rate	$ 37,616	$ 20,582	55 %	$ 24,766	$ 14,296	58 %
Total variable-rate	4,934	595	12 %	18,480	3,177	17 %
Total CO bonds, par value	$ 42,550	$ 21,177	50 %	$ 43,246	$ 17,473	40 %
Discount notes:						
Total fixed-rate	$ 12,118	$ —	— %	$ 16,620	$ 950	6 %
Total discount notes, par value	$ 12,118	$ —	— %	$ 16,620	$ 950	6 %

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

In March 2021, the FCA confirmed that the publication of the principal tenors of U.S. dollar LIBOR (i.e., overnight, one-month, three-month, six-month and 12-month LIBOR) will cease immediately following a final publication on June 30, 2023. As of January 1, 2022, the one-week and two-month U.S. dollar LIBOR settings and all non-U.S. dollar LIBOR settings ceased to be provided by any administrator. The FCA has indicated that it does not expect the remaining U.S. dollar LIBOR settings to become unrepresentative before the cessation date.

A portion of our advances, investments, derivative assets, derivative liabilities, and related collateral remain directly or indirectly indexed to U.S. dollar LIBOR with maturity dates that extend beyond June 30, 2023. As a result, we have taken and will continue to take steps to transition our LIBOR-linked financial instruments and contracts. To that end, and consistent with a Finance Agency supervisory letter sent to the FHLBanks in September 2019, we ceased purchasing investments that reference LIBOR and mature after December 31, 2021. Further, we have endeavored to identify and amend our financial instruments and contracts including advances, investments and derivatives that may require adding or adjusting fallback language.

We continue to take steps to adopt SOFR, the alternative to U.S. dollar LIBOR recommended by the Alternative Reference Rates Committee, for our relevant products, services and financial instruments. Since 2018, market activity in SOFR-linked financial instruments has continued to develop; however, the market transition from LIBOR to SOFR or another alternate reference rate has been complicated, including the development of term and credit adjustments to accommodate differences between LIBOR and SOFR or any other alternate reference rate as well as other market conventions. In addition, the overnight Treasury repurchase market underlying SOFR has experienced disruptions from time to time, which has resulted in unexpected fluctuations in SOFR. The introduction of alternate reference rates also creates challenges in hedging and asset-liability management and additional basis risk and increased volatility. While market activity in SOFR- linked financial instruments has continued to develop, the progress has been uneven. Further, a robust member demand for SOFR-linked advances has yet to develop.

We continue to implement our transition plan that has reduced our exposure to the transition and has the flexibility to evolve with market developments and standards, member needs, and guidance provided by the issuers of Agency securities. As a result, we do not expect the complete transition by June 30, 2023 to have a material adverse impact on the Bank's business, results of operations or financial condition.

For more information, see *Item 1A. Risk Factors - Changes in Response to the Replacement of the LIBOR Benchmark Interest Rate Could Adversely Affect Our Business, Financial Condition and Results of Operations.*

The following table presents our LIBOR-rate indexed financial instruments outstanding at December 31, 2021 and 2020 by year of maturity ($ amounts in millions).

LIBOR-Indexed Financial Instruments	**Year of Maturity**				
December 31, 2021	**2022**	**Through June 30, 2023**	**Thereafter**	**Total**	**% of Total Outstanding**
Assets:					
Advances, par value [1]	$ 134	$ 48	$ 2,259	$ 2,441	9 %
MBS, par value [2]	—	—	2,669	2,669	25 %
Total	$ 134	$ 48	$ 4,928	$ 5,110	
Interest-rate swaps - receive leg, notional [2]:					
Cleared	$ 1,366	$ 767	$ 2,336	$ 4,469	20 %
Uncleared	320	314	6,176	6,810	21 %
Total	$ 1,686	$ 1,081	$ 8,512	$ 11,279	
Liabilities:					
CO bonds, par value [2]	$ —	$ —	$ —	$ —	— %
Interest-rate swaps - pay leg, notional [2]:					
Cleared	$ 3,134	$ 1,150	$ —	$ 4,284	19 %
Uncleared	—	—	—	—	— %
Total	$ 3,134	$ 1,150	$ —	$ 4,284	
Other derivatives, notional:					
Interest-rate caps held [2]	$ 15	$ —	$ 611	$ 626	100 %

December 31, 2020	Year of Maturity 2021	2022	Through June 30, 2023	Thereafter	Total	% of Total Outstanding
Assets:						
Advances, par value [1]	$ 40	$ 353	$ 187	$ 2,913	$ 3,493	11 %
MBS, par value [2]	—	32	—	3,555	3,587	33 %
Total	$ 40	$ 385	$ 187	$ 6,468	$ 7,080	
Interest-rate swaps - receive leg, notional [2]:						
Cleared	$ 2,037	$ 1,464	$ 786	$ 4,218	$ 8,505	25 %
Uncleared	105	320	316	9,914	10,655	69 %
Total	$ 2,142	$ 1,784	$ 1,102	$ 14,132	$ 19,160	
Liabilities:						
CO bonds, par value [2]	$ 6,675	$ —	$ —	$ —	$ 6,675	15 %
Interest-rate swaps - pay leg, notional [2]:						
Cleared	$ 12,711	$ 234	$ 200	$ —	$ 13,145	39 %
Uncleared	2,950	—	—	204	3,154	20 %
Total	$ 15,661	$ 234	$ 200	$ 204	$ 16,299	
Other derivatives, notional:						
Interest-rate caps held [2]	$ —	$ 15	$ —	$ 611	$ 626	100 %

(1) Year of maturity on our advances is based on redemption term.

(2) Year of maturity on our MBS, interest-rate swaps, CO bonds and interest-rate caps is based on contractual maturity. The actual maturities on MBS will likely differ from contractual maturities as borrowers have the right to prepay their obligations with or without prepayment fees.

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

	Page Number
Management's Report on Internal Control over Financial Reporting	85
Report of Independent Registered Public Accounting Firm (PCAOB ID 238)	86
Statements of Condition as of December 31, 2021 and 2020	88
Statements of Income for the Years Ended December 31, 2021, 2020, and 2019	89
Statements of Comprehensive Income for the Years Ended December 31, 2021, 2020, and 2019	90
Statements of Capital for the Years Ended December 31, 2019, 2020, and 2021	91
Statements of Cash Flows for the Years Ended December 31, 2021, 2020, and 2019	92
Notes to Financial Statements:	
Note 1 - Summary of Significant Accounting Policies	94
Note 2 - Recently Adopted and Issued Accounting Guidance	102
Note 3 - Cash and Due from Banks	102
Note 4 - Investments	102
Note 5 - Advances	106
Note 6 - Mortgage Loans Held for Portfolio	108
Note 7 - Premises, Software and Equipment	112
Note 8 - Derivatives and Hedging Activities	112
Note 9 - Deposit Liabilities	118
Note 10 - Consolidated Obligations	119
Note 11 - Affordable Housing Program	121
Note 12 - Capital	121
Note 13 - Accumulated Other Comprehensive Income	125
Note 14 - Employee Retirement and Deferred Compensation Plans	126
Note 15 - Segment Information	129
Note 16 - Estimated Fair Values	131
Note 17 - Commitments and Contingencies	136
Note 18 - Related Party and Other Transactions	137
Defined Terms	139

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, 2021. 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, 2021.

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, 2021 and 2020, and the related statements of income, comprehensive income, capital and cash flows for each of the three years in the period ended December 31, 2021, 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, 2021, 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, 2021 and 2020, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2021 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, 2021, 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 the accompanying Management's Report on Internal Control over Financial Reporting. 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, 2021 was $55.8 billion, of which 83% were designated as hedging instruments, and the net fair value of derivative assets and liabilities as of December 31, 2021 was $220 million and $12 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 10, 2022

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,	
	2021	**2020**
Assets:		
Cash and due from banks (Note 3)	$ 867,880	$ 1,811,544
Interest-bearing deposits (Note 4)	100,041	100,026
Securities purchased under agreements to resell (Note 4)	3,500,000	2,500,000
Federal funds sold (Note 4)	2,580,000	1,215,000
Trading securities (Note 4)	3,946,799	5,094,703
Available-for-sale securities (amortized cost of $9,007,993 and $10,007,978) (Note 4)	9,159,935	10,144,899
Held-to-maturity securities (estimated fair values of $4,322,157 and $4,723,796) (Note 4)	4,313,773	4,701,302
Advances (Note 5)	27,497,835	31,347,486
Mortgage loans held for portfolio, net (Note 6)	7,616,134	8,515,645
Accrued interest receivable	80,758	103,076
Derivative assets, net (Note 7)	220,202	283,082
Other assets	121,246	107,993
Total assets	$ 60,004,603	$ 65,924,756
Liabilities:		
Deposits (Note 8)	$ 1,366,397	$ 1,375,206
Consolidated obligations (Note 9):		
Discount notes	12,116,358	16,617,079
Bonds	42,361,572	43,332,946
Total consolidated obligations, net	54,477,930	59,950,025
Accrued interest payable	88,068	63,581
Affordable Housing Program payable (Note 10)	31,049	34,402
Derivative liabilities, net (Note 7)	12,185	22,979
Mandatorily redeemable capital stock (Note 11)	50,422	250,768
Other liabilities	422,221	777,493
Total liabilities	56,448,272	62,474,454
Commitments and contingencies (Note 16)		
Capital (Note 11):		
Capital stock (putable at par value of $100 per share):		
Class B issued and outstanding shares: 22,462,009 and 22,075,696, respectively	2,246,201	2,207,570
Retained earnings:		
Unrestricted	889,869	868,904
Restricted	287,203	268,426
Total retained earnings	1,177,072	1,137,330
Total accumulated other comprehensive income (Note 12)	133,058	105,402
Total capital	3,556,331	3,450,302
Total liabilities and capital	$ 60,004,603	$ 65,924,756

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,		
	2021	**2020**	**2019**
Interest Income:			
Advances	$ 115,634	$ 329,675	$ 813,152
Interest-bearing deposits	534	5,652	22,050
Securities purchased under agreements to resell	1,730	11,644	79,100
Federal funds sold	2,821	10,793	62,235
Trading securities	48,510	90,860	53,213
Available-for-sale securities	99,646	103,658	214,558
Held-to-maturity securities	31,792	70,019	150,822
Mortgage loans held for portfolio	169,132	231,152	357,231
Total interest income	469,799	853,453	1,752,361
Interest Expense:			
Consolidated obligation discount notes	9,067	116,680	440,305
Consolidated obligation bonds	206,429	461,953	1,050,015
Deposits	162	2,856	12,899
Mandatorily redeemable capital stock	2,601	8,594	11,863
Other interest expense	—	—	37
Total interest expense	218,259	590,083	1,515,119
Net interest income	251,540	263,370	237,242
Provision for (reversal of) credit losses	(108)	140	(289)
Net interest income after provision for credit losses	251,648	263,230	237,531
Other Income:			
Net realized gains from sale of available-for-sale securities	—	504	—
Net gains (losses) on trading securities	(47,314)	(14,484)	32,996
Net gains (losses) on derivatives	3,684	(48,362)	(18,983)
Other, net	9,811	6,826	6,296
Total other income (loss)	(33,819)	(55,516)	20,309
Other Expenses:			
Compensation and benefits	60,622	60,789	55,494
Other operating expenses	30,089	31,609	29,526
Federal Housing Finance Agency	6,336	4,989	4,189
Office of Finance	6,377	5,005	4,907
Other	9,801	6,742	4,878
Total other expenses	113,225	109,134	98,994
Income before assessments	104,604	98,580	158,846
Affordable Housing Program assessments	10,720	10,717	17,071
Net income	$ 93,884	$ 87,863	$ 141,775

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,		
	2021	**2020**	**2019**
Net income	$ 93,884	$ 87,863	$ 141,775
Other Comprehensive Income:			
Net change in unrealized gains on available-for-sale securities	15,021	47,108	36,827
Pension benefits, net (Note 13)	12,635	(9,082)	(11,138)
Total other comprehensive income	27,656	38,026	25,689
Total comprehensive income	$ 121,540	$ 125,889	$ 167,464

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

Federal Home Loan Bank of Indianapolis
Statements of Capital
Years Ended December 31, 2019, 2020, and 2021
($ 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, 2018	19,310	$ 1,930,952	$ 855,311	$ 222,499	$ 1,077,810	$ 41,687	$ 3,050,449
Total comprehensive income			113,420	28,355	141,775	25,689	167,464
Proceeds from issuance of capital stock	1,941	194,102					194,102
Shares reclassified to mandatorily redeemable capital stock, net	(1,510)	(150,978)					(150,978)
Cash dividends on capital stock (5.31%)			(104,277)	—	(104,277)		(104,277)
Balance, December 31, 2019	19,741	$ 1,974,076	$ 864,454	$ 250,854	$ 1,115,308	$ 67,376	$ 3,156,760
Total comprehensive income			70,291	17,572	87,863	38,026	125,889
Proceeds from issuance of capital stock	2,669	266,906					266,906
Redemption/repurchase of capital stock	(6)	(621)					(621)
Shares reclassified to mandatorily redeemable capital stock, net	(328)	(32,791)					(32,791)
Partial recovery of prior capital distribution to Financing Corporation			10,574	—	10,574		10,574
Cash dividends on capital stock (3.66%)			(76,415)	—	(76,415)		(76,415)
Balance, December 31, 2020	22,076	$ 2,207,570	$ 868,904	$ 268,426	$ 1,137,330	$ 105,402	$ 3,450,302
Total 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

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,		
	2021	**2020**	**2019**
Operating Activities:			
Net income	$ 93,884	$ 87,863	$ 141,775
Adjustments to reconcile net income to net cash provided by (used in) operating activities:			
Amortization and depreciation	84,157	74,130	44,492
Changes in net derivative and hedging activities	178,305	(420,090)	(287,098)
Provision for (reversal of) credit losses	(108)	140	(289)
Net losses (gains) on trading securities	47,314	14,484	(32,996)
Net realized gains from sale of available-for-sale securities	—	(504)	—
Changes in:			
Accrued interest receivable	21,671	28,855	(7,660)
Other assets	(21,453)	(28,853)	(6,538)
Accrued interest payable	24,487	(115,401)	(986)
Other liabilities	15,743	41,255	20,684
Total adjustments, net	350,116	(405,984)	(270,391)
Net cash provided by (used in) operating activities	444,000	(318,121)	(128,616)
Investing Activities:			
Net change in:			
Interest-bearing deposits	487,626	169,514	65,727
Securities purchased under agreements to resell	(1,000,000)	(1,000,000)	1,712,726
Federal funds sold	(1,365,000)	1,335,000	535,000
Trading securities:			
Proceeds from maturities	2,950,000	4,160,000	—
Proceeds from sales	50,006	—	249,844
Purchases	(1,899,417)	(4,252,538)	(5,233,497)
Available-for-sale securities:			
Proceeds from maturities and paydowns	835,255	593,550	510,500
Proceeds from sales	—	96,779	—
Purchases	(319,623)	(1,851,436)	(785,129)
Held-to-maturity securities:			
Proceeds from maturities and paydowns	996,151	1,428,899	1,114,938
Purchases	(784,446)	(744,501)	(663,607)
Advances:			
Principal repayments	224,935,571	255,014,417	351,631,834
Disbursements to members	(221,554,319)	(253,433,610)	(351,074,140)
Mortgage loans held for portfolio:			
Principal collections	2,849,214	4,398,392	1,879,313
Purchases from members	(2,150,713)	(2,082,767)	(1,307,159)
Purchases of premises, software, and equipment	(4,411)	(4,641)	(6,230)
Loans to other Federal Home Loan Banks:			
Principal repayments	40,000	90,000	—
Disbursements	(40,000)	(90,000)	—
Net cash provided by (used in) investing activities	4,025,894	3,827,058	(1,369,880)

(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,		
	2021	**2020**	**2019**
Financing Activities:			
Net change in deposits	(8,809)	414,531	375,975
Net proceeds (payments) on derivative contracts with financing elements	(25,365)	(3,694)	1,824
Net proceeds from issuance of consolidated obligations:			
Discount notes	291,172,745	355,337,396	342,745,604
Bonds	43,151,651	48,663,468	40,241,691
Payments for matured and retired consolidated obligations:			
Discount notes	(295,668,613)	(356,372,123)	(345,937,042)
Bonds	(43,819,310)	(50,052,784)	(35,902,870)
Loans from other Federal Home Loan Banks:			
Proceeds from borrowings	—	—	250,000
Principal repayments	—	—	(250,000)
Proceeds from issuance of capital stock	99,638	266,906	194,102
Proceeds from issuance of mandatorily redeemable capital stock	—	—	3,704
Payments for redemption/repurchase of capital stock	(56,277)	(621)	—
Payments for redemption/repurchase of mandatorily redeemable capital stock	(205,076)	(104,925)	(656)
Partial recovery of prior capital distribution to Financing Corporation	—	10,574	—
Dividend payments on capital stock	(54,142)	(76,415)	(104,277)
Net cash provided by (used in) financing activities	(5,413,558)	(1,917,687)	1,618,055
Net increase (decrease) in cash and due from banks	(943,664)	1,591,250	119,559
Cash and due from banks at beginning of year	1,811,544	220,294	100,735
Cash and due from banks at end of year	$ 867,880	$ 1,811,544	$ 220,294
Supplemental Disclosures:			
Cash activities:			
Interest payments	$ 265,209	$ 804,173	$ 1,501,471
Affordable Housing Program payments	14,073	14,399	19,734
Non-cash activities:			
Purchases of investment securities, traded but not yet settled	—	236,507	84,086
Capitalized interest on certain held-to-maturity securities	1,278	1,412	4,624
Par value of shares reclassified to mandatorily redeemable capital stock, net	4,730	32,791	150,978

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, 2021 and 2020, and the Statements of Income, Comprehensive Income, Capital, and Cash Flows for the years ended December 31, 2021, 2020, and 2019. 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 "Bank," "we," "us," and "our" 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 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. While eligible to borrow, Housing Associates 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 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. Deposits, other borrowings and capital stock issued to members provide additional funds. We primarily use these funds to:

- disburse advances to members;
- acquire mortgage loans from PFIs through our MPP;
- maintain liquidity; and
- invest in 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.

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 have been 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*.

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. These securities are held in safekeeping in the Bank's name by third-party custodians approved by us. 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. Federal funds sold are short-term, unsecured loans that are generally transacted on 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 fair value. We record changes in the fair value of these securities 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. 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.

Certain changes in circumstances may cause us to change our intent to hold a particular security to maturity without necessarily calling into question our intent to hold other debt securities to maturity. Thus, the sale or transfer of an HTM security due to certain changes in circumstances, such as evidence of significant deterioration in the issuer's creditworthiness or changes in regulatory requirements, is not considered to be inconsistent with its original classification. Other events may also cause us to sell or transfer an HTM security without necessarily calling into question our intent to hold other debt securities to maturity, but such events must be isolated, non-recurring, unusual, and could not have been reasonably anticipated.

Sales of HTM debt securities that meet either of the following two conditions may be considered as maturities for purposes of the classification of securities: (i) the sale occurs near enough to its maturity date (or call date, if exercise of the call is probable) that interest-rate risk is substantially eliminated as a pricing factor and any changes in market interest rates would not have a significant effect on the security's fair value, or (ii) the sale occurs after we have already collected a substantial portion (at least 85%) of the principal outstanding at acquisition due either to prepayments or to scheduled payments payable in equal installments (both principal and interest) over its term.

AFS Securities. Securities that are not classified as trading or HTM are classified as AFS and carried at estimated fair value. We record changes in the fair value of these securities 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, we record the portion of the change in fair value attributable to the risk being hedged in interest income together with the related change in the fair value of the derivative, and record the remainder of the change in the fair value in OCI as net change in unrealized gains (losses) on AFS securities.

Amortization of Purchase Premiums and Discounts. Since we hold a large number of similar loans underlying our 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 securities, we amortize or accrete premiums, discounts, and cumulative fair-value hedging basis adjustments using a level-yield methodology over the contractual life of each security, with the exception of our callable non-MBS securities, on which the purchase premium is amortized to the next call date. For all non-MBS securities, prepayments are not estimated but only taken into account as they actually occur.

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 realized gains (losses) from sale of 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 we fund 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 reported at cost, adjusted to include premiums paid to and discounts received from PFIs, hedging basis adjustments, and the allowance for credit losses.

Amortization 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). On loans with remittances on a scheduled/scheduled basis, we receive monthly principal and interest payments from the servicer regardless of whether the borrower has made payments to the servicer. Monthly servicer remittances on 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.

Loan Participations. We may sell participating interests in MPP loans acquired from our PFIs to other FHLBanks. The terms of the sale of these participating interests meet the accounting requirements for a sale and, therefore, the participating interests are derecognized from our reported mortgage loan balances and a pro-rata portion of the fixed LRA is assumed by the participating FHLBank for its use in loss mitigation. As a result, available funds remaining in our LRA are limited to our pro-rata portion of the fixed LRA that is associated with the participating interests retained by us. The portion of the participation fees received related to our upfront costs is recognized immediately into income, while the remaining portion related to our ongoing costs is deferred and amortized to income over the remaining life of the participated loans.

Troubled Debt Restructuring. A TDR related to MPP loans typically occurs when a concession is granted to a borrower for economic or legal reasons related to the borrower's financial difficulties that would not have been otherwise considered. Although we do not participate in government-sponsored loan modification programs, we do consider certain conventional loan modifications to be TDRs when the modification agreement permits the recapitalization of past due amounts, generally up to the original loan amount. If a borrower is having financial difficulty and a significant concession has been granted by the PFI with our approval, the loan modification is considered a TDR. No other terms of the original loan are modified, except for the possible extension of the contractual maturity date on a case-by-case basis. In no event does the borrower's original interest rate change.

As a result of temporary accounting guidance that remained in effect throughout 2021, we continued excluding all qualifying COVID-19-related loan modifications considered to be formal, i.e. the legal terms of the loan were changed, from TDR classification and accounting. We do not consider any short-term, informal, i.e. the legal terms of the loan have not changed, modifications or payment deferrals alone to be a TDR and thus we continue to follow our existing past-due, non-accrual, TDR and charge-off accounting policies for such loan modifications.

Modifications of government loans are not considered or accounted for as TDRs because we anticipate no loss of principal or interest accrued at the original contract rate, or significant delay, due to the government guarantee or insurance.

Charge-Offs. A charge-off is recorded to the extent that the amortized cost (including UPB, unamortized premiums or discounts, and hedging basis adjustments) in 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 can clearly document 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. As a result of adopting new accounting guidance on January 1, 2020, our 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. If necessary, we write-off uncollectible accrued interest with a reversal of interest income.

Prior to January 1, 2020, we recorded an allowance for credit losses (or OTTI on investment securities) if it was probable that a loss had been incurred as of the statement of condition date and the amount of loss could be reasonably estimated. In addition, our allowance for credit losses on our mortgage loans was based on a loss emergence period of 24 months. For more information on the allowance methodology related to our financial instruments, see *Note 4 - Investments, Note 5 - Advances, Note 6 - Mortgage Loans Held for Portfolio, and Note 17 - Commitments and Contingencies.*

Derivatives and Hedging Activities. We record derivative instruments, related cash collateral (including initial margin received or pledged/posted), variation margin received or pledged/posted, and associated 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.

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 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. Hedging relationships must meet certain criteria including, but not limited to, formal documentation of the hedging relationship and an expectation to be highly effective to qualify for hedge accounting. Two approaches to account for qualifying fair-value hedge relationships include:

(i) Shortcut hedge accounting - Transactions 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 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 hedge relationship, a quantitative long-haul method that we can apply should we subsequently determine a derivative 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 transactions are highly effective in 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 remain 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 to ensure the hedge relationship has been highly effective historically and is expected to be highly effective in the future.

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

- *Total Contractual Coupon Method* - In calculating the change in the 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 cash flows.
- *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 coupon cash flows by aligning the interest component of the swap 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 only the net interest settlements and the change in fair value of these derivatives in other income as net gains (losses) on derivatives 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 an adjustment to the income or expense of the designated hedged item. The difference between the interest receivable and payable on economic hedges are 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; (ii) the derivative and/or the hedged item expires or is sold, terminated, or exercised; (iii) a hedged firm commitment no longer meets the definition of a firm commitment; or (iv) we elect to discontinue hedge accounting.

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 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.

Embedded Derivatives. We may issue consolidated obligations, disburse advances, or purchase financial instruments in which a derivative instrument is embedded. In order to determine whether an embedded derivative must be bifurcated from the host instrument and separately valued, we must assess, upon execution of the transaction, whether the economic characteristics of the embedded derivative are clearly and closely related to the economic characteristics of the remaining component of the consolidated obligation, advance or purchased financial instrument (the host contract) and whether a separate, non-embedded instrument with the same terms as the embedded instrument would meet the definition of a derivative instrument.

If we determine that (i) the embedded derivative has economic characteristics that are not clearly and closely related to the economic characteristics of the host contract and (ii) a separate, stand-alone instrument with the same terms would qualify as a derivative instrument, the embedded derivative is separated from the host contract, carried at fair value, and designated as a stand-alone derivative instrument pursuant to an economic hedge, and the host contract is accounted for based on the guidance applicable to instruments of that type that are not hedged. However, if (i) the entire contract (the host contract and the embedded derivative) is required to be measured at fair value, with changes in fair value reported in earnings (such as an investment security classified as trading), or (ii) we cannot reliably identify and measure the embedded derivative for purposes of separating that derivative from its host contract, the entire contract is carried at fair value, and no portion of the contract is designated as a hedging instrument.

Financial Instruments Meeting Netting Requirements. We present certain financial instruments, including our derivative asset and liability positions as well as cash collateral received or pledged, on a net basis when we have a legal right of offset and all other requirements for netting are met (collectively referred to as the netting requirements).

The net exposure for these financial instruments can change on a daily basis; therefore, there may be a delay between the time a change in the exposure is identified and additional collateral is requested, and the time the additional collateral is received or pledged. Likewise, there may be a delay before excess collateral is returned. 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.*

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 improvements and major renewals, but expense maintenance and repairs when incurred. We depreciate building improvements using the straight-line method over the estimated useful life of the improvement. In addition, we capitalize software development costs for internal use software with an estimated economic useful life of at least one year. If capitalized, we 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 recorded at amortized cost, adjusted to include concessions, discounts, premiums, principal payments, and cumulative fair-value hedging basis adjustments.

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.

Concessions. Concessions are paid to dealers in connection with the issuance of certain consolidated obligations. The Office of Finance prorates the amount of our 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.

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 are then subject to redemption, at which time a five-year redemption period commences for Class B stock. 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.

Restricted Retained Earnings. In accordance with our JCE Agreement, 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 calendar quarter, equals at least 1% of the average balance of the Bank's outstanding consolidated obligations for the current quarter.

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 when the cost of all settlements during a year is greater than 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

We did not adopt any new accounting guidance or elect to apply certain optional expedients prescribed by existing accounting guidance that were applicable and available during the year ended December 31, 2021. Further, the FASB did not issue any new and applicable accounting guidance in 2021.

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, 2021, 2020, and 2019, were $227,913, $65,945, and $19,420, 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. These investments are generally transacted with counterparties that maintain a credit rating of triple-B or higher (investment grade) by an NRSRO. At December 31, 2021 and 2020, none of these investments were with counterparties rated below single-A and none were with unrated counterparties. The NRSRO ratings may differ from our 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. As such, no allowance for credit losses was recorded for these investments at December 31, 2021 and 2020.

Securities Purchased Under Agreements to Resell. We use the collateral maintenance provision 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. Based upon the collateral held as security and collateral maintenance provisions with our counterparties, no allowance for credit losses was recorded for securities purchased under agreements to resell at December 31, 2021 and 2020.

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, 2021 and 2020, all investments in federal funds sold were repaid according to their contractual terms and, therefore, no allowance for credit losses was recorded.

Investment Securities.

Trading Securities.

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

Security Type	December 31, 2021	December 31, 2020
Non-MBS:		
U.S. Treasury obligations	$ 3,946,799	$ 5,094,703
Total trading securities at estimated fair value	$ 3,946,799	$ 5,094,703

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,		
	2021	2020	2019
Net unrealized gains (losses) on trading securities held at year end	$ (14,638)	$ (36,994)	$ 30,705
Net realized gains (losses) on trading securities that matured/sold during the year	(32,676)	22,510	2,291
Net gains (losses) on trading securities	$ (47,314)	$ (14,484)	$ 32,996

Available-for-Sale Securities**.**

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

December 31, 2021	Amortized Cost [(1)]	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
GSE and TVA debentures	$ 2,651,571	$ 45,557	$ (12)	$ 2,697,116
GSE multifamily MBS	6,356,422	109,956	(3,559)	6,462,819
Total AFS securities	$ 9,007,993	$ 155,513	$ (3,571)	$ 9,159,935
December 31, 2020				
GSE and TVA debentures	$ 3,462,885	$ 40,252	$ —	$ 3,503,137
GSE multifamily MBS	6,545,093	98,263	(1,594)	6,641,762
Total AFS securities	$ 10,007,978	$ 138,515	$ (1,594)	$ 10,144,899

(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. Net unamortized premium at December 31, 2021 and 2020 totaled $14,344 and $16,300, respectively. The applicable fair value hedging basis adjustments at December 31, 2021 and 2020 totaled $206,199 and $627,619, respectively. Excludes accrued interest receivable at December 31, 2021 and 2020 of $32,127 and $34,616, respectively.

Unrealized Loss Positions. The following table presents 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.

	Less than 12 months		12 months or more		Total	
December 31, 2021	**Estimated Fair Value**	**Unrealized Losses**	**Estimated Fair Value**	**Unrealized Losses**	**Estimated Fair Value**	**Unrealized Losses**
GSE and TVA debentures	$ 250,145	$ (12)	$ —	$ —	$ 250,145	$ (12)
GSE multifamily MBS	384,015	(3,559)	—	—	384,015	(3,559)
Total impaired AFS securities	$ 634,160	$ (3,571)	$ —	$ —	$ 634,160	$ (3,571)
December 31, 2020						
GSE multifamily MBS	$ 132,054	$ (179)	$ 179,387	$ (1,415)	$ 311,441	$ (1,594)
Total impaired AFS securities	$ 132,054	$ (179)	$ 179,387	$ (1,415)	$ 311,441	$ (1,594)

Realized Gains and Losses. During the year ended December 31, 2020, for strategic, economic and operational reasons, we sold certain of our GSE MBS. Proceeds from the AFS sales totaled $96,779, resulting in net realized gains of $504, comprised of realized gains of $715 and realized losses of $211 determined by the specific identification method.

Contractual Maturity. The amortized cost and estimated fair value of 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, 2021		December 31, 2020	
Year of Contractual Maturity	**Amortized Cost**	**Estimated Fair Value**	**Amortized Cost**	**Estimated Fair Value**
Due in 1 year or less	$ 581,801	$ 582,240	$ 705,134	$ 705,442
Due after 1 year through 5 years	1,494,109	1,523,600	1,215,038	1,225,187
Due after 5 years through 10 years	575,661	591,276	1,542,713	1,572,508
Total non-MBS	2,651,571	2,697,116	3,462,885	3,503,137
Total MBS	6,356,422	6,462,819	6,545,093	6,641,762
Total AFS securities	$ 9,007,993	$ 9,159,935	$10,007,978	$10,144,899

Allowance for Credit Losses. At December 31, 2021 and 2020, 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. These may differ for 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. 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.

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, after recording the allowance for credit losses, any difference between the security's estimated fair value and amortized cost remaining 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 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 basis is written down to the security's estimated fair value at the reporting date with any such impairment reported in earnings as net gains (losses) on investment securities.

At December 31, 2021 and 2020, certain of our AFS securities were in an unrealized loss position; however, we did not record an allowance for credit losses because those losses were considered temporary and we expected to recover the entire amortized cost basis on these securities at maturity based upon the following 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, 2021	Amortized Cost [1]	Gross Unrecognized Holding Gains	Gross Unrecognized Holding Losses	Estimated Fair Value
MBS:				
Other U.S. obligations single-family MBS	$ 2,626,143	$ 7,384	$ (9,238)	$ 2,624,289
GSE single-family MBS	815,924	14,424	(4,773)	825,575
GSE multifamily MBS	871,706	779	(192)	872,293
Total HTM securities	$ 4,313,773	$ 22,587	$ (14,203)	$ 4,322,157
December 31, 2020				
MBS:				
Other U.S. obligations single-family MBS	$ 2,622,677	$ 6,920	$ (4,590)	$ 2,625,007
GSE single-family MBS	1,196,326	21,385	(1,177)	1,216,534
GSE multifamily MBS	882,299	255	(299)	882,255
Total HTM securities	$ 4,701,302	$ 28,560	$ (6,066)	$ 4,723,796

(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, 2021 and 2020 totaled $28,440 and $7,101, respectively.

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

Allowance for Credit Losses. At December 31, 2021 and 2020, 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. These may differ for 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, 2021 and 2020, we did not record an allowance for credit losses on any of our HTM securities based on the following 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.

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 LIBOR or another specified index, including SOFR. Longer-term advances may be available subject to market conditions for both fixed-rate and adjustable-rate products.

The following table presents advances outstanding by redemption term.

	December 31, 2021		December 31, 2020	
Redemption Term	**Amount**	**WAIR %**	**Amount**	**WAIR %**
Due in 1 year or less	$ 7,863,703	0.59	$ 10,115,576	0.51
Due after 1 year through 2 years	2,684,996	2.02	2,149,839	1.57
Due after 2 years through 3 years	3,536,759	1.35	2,760,624	2.02
Due after 3 years through 4 years	2,931,260	1.29	3,725,103	1.36
Due after 4 years through 5 years	1,908,432	1.34	3,020,039	1.29
Thereafter	8,384,458	0.82	8,919,678	1.05
Total advances, par value	27,309,608	1.03	30,690,859	1.06
Fair-value hedging basis adjustments, net	179,115		645,946	
Unamortized swap termination fees associated with modified advances, net of deferred prepayment fees	9,112		10,681	
Total advances [1]	$ 27,497,835		$ 31,347,486	

[1] Carrying value equals amortized cost, which excludes accrued interest receivable at December 31, 2021 and 2020 of $13,075 and $14,961, 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. Borrowers typically exercise their call options for fixed-rate advances when interest rates decline. 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.

The following table presents 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, 2021	**December 31, 2020**	**December 31, 2021**	**December 31, 2020**
Due in 1 year or less	$ 12,547,866	$ 15,296,034	$ 13,452,703	$ 14,645,076
Due after 1 year through 2 years	2,578,396	1,797,049	3,090,101	3,107,339
Due after 2 years through 3 years	2,127,759	2,440,024	3,636,259	3,160,729
Due after 3 years through 4 years	1,997,060	2,246,102	3,007,160	3,824,603
Due after 4 years through 5 years	1,530,307	2,076,839	1,485,332	2,585,439
Thereafter	6,528,220	6,834,811	2,638,053	3,367,673
Total advances, par value	$ 27,309,608	$ 30,690,859	$ 27,309,608	$ 30,690,859

Advance Concentrations. At December 31, 2021 and 2020, our top five borrowers held 43% and 44%, respectively, of total advances outstanding at par.

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.

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 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. To ensure that we are sufficiently protected, we evaluate and determine whether a member may retain physical possession of its collateral that is 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 basic framework that considers the adequacy of the advances' associated collateral and the associated members' 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 our 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. 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. At December 31, 2021 and 2020, 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, 2021 and 2020, we did not have any advances that were past due, on non-accrual status, or considered impaired. In addition, there were no TDRs related to advances during the years ended December 31, 2021, 2020, or 2019.

Based upon the collateral held as security, our credit extension and collateral policies, our credit analysis and the repayment history on advances, we have not recorded an allowance for credit losses on advances.

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 mortgage loans held for portfolio by term and type. The balances reflect the sale of a 90% participating interest in a $100 million MCC of certain newly acquired MPP loans to another FHLBank in 2016.

Term	December 31, 2021	December 31, 2020
Fixed-rate long-term mortgages	$ 6,417,543	$ 7,257,237
Fixed-rate medium-term [1] mortgages	1,016,851	1,065,329
Total mortgage loans held for portfolio, UPB	7,434,394	8,322,566
Unamortized premiums	181,172	187,425
Unamortized discounts	(2,389)	(1,638)
Hedging basis adjustments, net	3,157	7,642
Total mortgage loans held for portfolio	7,616,334	8,515,995
Allowance for credit losses	(200)	(350)
Total mortgage loans held for portfolio, net [2]	$ 7,616,134	$ 8,515,645

(1) Defined as a term of 15 years or less at origination.
(2) Excludes accrued interest receivable at December 31, 2021 and 2020 of $27,977 and $34,151, respectively.

Type	December 31, 2021	December 31, 2020
Conventional	$ 7,254,056	$ 8,069,274
Government-guaranteed or -insured	180,338	253,292
Total mortgage loans held for portfolio, UPB	$ 7,434,394	$ 8,322,566

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 HUD. 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.

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 prior origination years. Amounts are based on amortized cost, which excludes accrued interest receivable.

	Origination Year		
Payment Status as of December 31, 2021	**Prior to 2017**	**2017 to 2021**	**Total**
Past due:			
30-59 days	$ 16,968	$ 12,662	$ 29,630
60-89 days	4,175	1,767	5,942
90 days or more	18,599	11,206	29,805
Total past due	39,742	25,635	65,377
Total current	2,447,420	4,921,101	7,368,521
Total conventional mortgage loans, amortized cost	$ 2,487,162	$ 4,946,736	$ 7,433,898

As of December 31, 2021, the UPB of conventional loans in an informal forbearance arrangement included amounts 30-59 days past due of $1,730, 60-89 days past due of $1,018, and 90 days or more past due of $16,634, for total past due of $19,382.

	Origination Year		
Payment Status as of December 31, 2020	**Prior to 2016**	**2016 to 2020**	**Total**
Past due:			
30-59 days	$ 19,893	$ 22,130	$ 42,023
60-89 days	6,980	12,078	19,058
90 days or more	27,467	67,075	94,542
Total past due	54,340	101,283	155,623
Total current	2,468,908	5,635,070	8,103,978
Total conventional mortgage loans, amortized cost [(1)]	$ 2,523,248	$ 5,736,353	$ 8,259,601

As of December 31, 2020, the UPB of conventional loans in an informal forbearance arrangement included amounts 30-59 days past due of $10,214, 60-89 days past due of $12,661, and 90 days or more past due of $79,011, for total past due of $101,886.

Other Delinquency Statistics as of December 31, 2021	Conventional	Government	Total
In process of foreclosure [1]	$ 1,999	$ —	$ 1,999
Serious delinquency rate [2]	0.40 %	0.86 %	0.41 %
Past due 90 days or more still accruing interest [3]	$ 15,725	$ 1,364	$ 17,089
On non-accrual status [4]	$ 23,487	$ —	$ 23,487
Other Delinquency Statistics as of December 31, 2020			
In process of foreclosure [1]	$ 2,689	$ —	$ 2,689
Serious delinquency rate [2]	1.14 %	3.36 %	1.21 %
Past due 90 days or more still accruing interest [3]	$ 36,585	$ 7,933	$ 44,518
On non-accrual status [4]	$ 87,763	$ —	$ 87,763

(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 total mortgage loans. 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.

(4) As of December 31, 2021 and 2020, $11,701 and $36,409, respectively, of UPB of these conventional mortgage loans on non-accrual status did not have a related allowance for credit losses because these loans were either previously charged off to the expected recoverable value and/or the fair value of the underlying collateral, including any credit enhancements, exceeded the amortized cost of the loans. Additionally, the UPB of these conventional mortgage loans on non-accrual status in informal forbearance arrangements related to the COVID-19 pandemic totaled $7,130 and $59,306, respectively.

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, current and historical 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 all TDRs, 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.

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 current and historical 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 life 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.

Individually Evaluated Mortgage Loans. Certain conventional mortgage loans, primarily TDRs, are specifically identified for purposes of calculating the allowance for credit losses. The measurement of our allowance for individually evaluated loans considers loan-specific attribution data similar to homogeneous pools of delinquent loans evaluated on a collective basis, including the use of loan-level property values from a third-party.

We also 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 HUD statements, sales listings or other evidence of current expected liquidation amounts.

Qualitative Factors. We also assess 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	**2021**	**2020**	**2019**
Balance, beginning of year	$ 350	$ 300	$ 600
Charge-offs	(81)	(140)	(137)
Recoveries	39	50	126
Provision for (reversal of) credit losses	(108)	140	(289)
Balance, end of year	$ 200	$ 350	$ 300

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, 2021 or 2020. 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, 2021	December 31, 2020
Premises	$ 15,674	$ 15,769
Computer software	49,886	48,952
Data processing equipment	5,354	6,048
Furniture and equipment	5,946	6,365
Other	640	756
Premises, software and equipment, in service	77,500	77,890
Accumulated depreciation and amortization	(48,420)	(46,681)
Premises, software and equipment, in service, net	29,080	31,209
Capitalized assets in progress	1,491	2,784
Premises, software and equipment, net	$ 30,571	$ 33,993

The depreciation and amortization expense for premises, software and equipment for the years ended December 31, 2021, 2020, and 2019 was $7,833, $7,198, and $6,879, respectively, including amortization of computer software costs of $5,547, $5,315, and $4,983, 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 amount 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.

Consistent with Finance Agency regulation, we enter into derivatives to (i) manage the interest-rate risk exposures inherent in our otherwise unhedged assets and funding positions, (ii) achieve our risk management objectives, and (iii) act as an intermediary between our members and counterparties. 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. However, the use of derivatives is an integral part of our financial management strategy.

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.

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. Over-the-counter derivative transactions may be either executed with a counterparty (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 with the clearinghouse.

Types of Derivatives. We use the following derivative instruments to reduce funding costs and to manage our exposure to interest-rate risks inherent in the normal course of business.

Interest-Rate Swaps. The Bank uses interest-rate swaps to hedge the risk of changes in the fair value of certain of its 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 LIBOR, EFFR, or SOFR.

Interest-Rate Cap and Floor Agreements. Caps and floors are used to protect against the interest rate on a variable-rate asset or liability falling below or rising above a certain level.

Interest-Rate Swaptions. To protect against the adverse effects of sudden increases or decreases in interest rates, we utilize payer or receiver swaptions, respectively.

Forward Contracts. To protect against changes in the market values of fixed-rate MDCs resulting from changes in market interest rates, we normally sell TBA MBS or other derivatives for forward settlement.

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 securities, 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 outflow on the derivatives with the cash inflow 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 variable-rate advance products with different 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 a consolidated obligation by matching the cash inflow on the derivative with the cash outflow on the consolidated obligation.

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 (typically one- or three-month LIBOR or EFFR). These transactions are typically treated as fair-value hedges. Additionally, we may issue variable-rate CO bonds indexed to LIBOR, 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, CFTC 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. The exposure thresholds above which collateral must be delivered vary; the threshold is zero in some cases. Additionally, collateral related to derivatives with member institutions includes collateral assigned to us as evidenced by a written security agreement and held by the member institution for our benefit.

For certain of our uncleared derivatives, we have credit support agreements that contain provisions requiring us to post additional collateral with our counterparties if there is deterioration in our credit rating. If our credit rating is lowered by an NRSRO, we could be required to deliver additional collateral on uncleared derivative instruments in net liability positions. The aggregate estimated fair value of all uncleared derivative instruments with credit-risk-related contingent features that were in a net liability position (before cash collateral and related accrued interest on cash collateral) at December 31, 2021 was $314, for which we have posted collateral in cash, including accrued interest, of $894 in the normal course of business. If our credit rating had been lowered by an NRSRO (from an S&P equivalent of AA+ to AA), we would not have been required to deliver additional collateral to our uncleared derivative counterparties at December 31, 2021.

Cleared Derivatives. For cleared derivatives, the clearinghouse is our counterparty. We use LCH and CME 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 daily settlement payments.

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, 2021, we were not required by our clearing agents to post any additional margin.

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 derivative assets and liabilities.

	December 31, 2021			December 31, 2020		
	Notional Amount	Derivative Assets	Derivative Liabilities	Notional Amount	Derivative Assets	Derivative Liabilities
Derivatives designated as hedging instruments:						
Interest-rate swaps	$ 46,395,451	$ 105,446	$ 413,324	$ 40,227,966	$ 13,018	$ 761,330
Derivatives not designated as hedging instruments:						
Economic hedges:						
Interest-rate swaps	8,595,000	357	148	9,177,000	5,404	181
Interest-rate caps/floors	625,500	1,077	—	625,500	1,113	—
Interest-rate forwards	98,200	1	199	180,900	—	1,486
MDCs	96,424	45	105	180,152	1,022	—
Total derivatives not designated as hedging instruments	9,415,124	1,480	452	10,163,552	7,539	1,667
Total derivatives before adjustments	$ 55,810,575	106,926	413,776	$ 50,391,518	20,557	762,997
Netting adjustments and cash collateral [1]		113,276	(401,591)		262,525	(740,018)
Total derivatives, net		$ 220,202	$ 12,185		$ 283,082	$ 22,979

(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, 2021 and 2020, including accrued interest, totaled $515,761 and $1,003,437, respectively. Cash collateral received from counterparties and held at both December 31, 2021 and 2020, including accrued interest, totaled $894. At December 31, 2021 and 2020, no securities were pledged as collateral.

The following table presents separately the estimated fair value of derivative instruments meeting and not meeting netting requirements, including the effect of the related collateral.

	December 31, 2021		December 31, 2020	
	Derivative Assets	**Derivative Liabilities**	**Derivative Assets**	**Derivative Liabilities**
Derivative instruments meeting netting requirements:				
Gross recognized amount				
Uncleared	$ 105,667	$ 411,886	$ 13,793	$ 755,118
Cleared	1,213	1,586	5,742	6,393
Total gross recognized amount	106,880	413,472	19,535	761,511
Gross amounts of netting adjustments and cash collateral				
Uncleared	(105,417)	(400,005)	(13,793)	(733,625)
Cleared	218,693	(1,586)	276,318	(6,393)
Total gross amounts of netting adjustments and cash collateral	113,276	(401,591)	262,525	(740,018)
Net amounts after netting adjustments and cash collateral				
Uncleared	250	11,881	—	21,493
Cleared	219,906	—	282,060	—
Total net amounts after netting adjustments and cash collateral	220,156	11,881	282,060	21,493
Derivative instruments not meeting netting requirements [1]	46	304	1,022	1,486
Total derivatives, at estimated fair value	$ 220,202	$ 12,185	$ 283,082	$ 22,979

(1) Includes MDCs and certain interest-rate forward contracts.

The following table presents the impact of qualifying fair-value hedging relationships on net interest income by hedged item.

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 [4]	$ (187,171)	$ (128,258)	$ 100,433	$ (214,996)
Total interest income (expense) recorded in the Statement of Income [5]	$ 115,634	$ 99,646	$ (206,429)	$ 8,851
Year Ended December 31, 2020				
Net impact of fair-value hedging relationships on net interest income:				
Net interest settlements on derivatives [1]	$ (135,342)	$ (109,907)	$ 51,091	$ (194,158)
Net gains (losses) on derivatives [2]	(384,880)	(507,403)	21,467	(870,816)
Net gains (losses) on hedged items [3]	382,167	494,481	(13,617)	863,031
Net impact on net interest income [4]	$ (138,055)	$ (122,829)	$ 58,941	$ (201,943)
Total interest income (expense) recorded in the Statement of Income [5]	$ 329,675	$ 103,658	$ (461,953)	$ (28,620)
Year Ended December 31, 2019				
Net impact of fair-value hedging relationships on net interest income:				
Net interest settlements on derivatives [1]	$ 61,614	$ 31,242	$ (31,949)	$ 60,907
Net gains (losses) on derivatives [2]	(316,304)	(406,120)	99,104	(623,320)
Net gains (losses) on hedged items [3]	318,279	386,247	(110,094)	594,432
Net impact on net interest income [4]	$ 63,589	$ 11,369	$ (42,939)	$ 32,019
Total interest income (expense) recorded in the Statement of Income [5]	$ 813,152	$ 214,558	$ (1,050,015)	$ (22,305)

(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 changes in estimated fair value and price alignment interest associated with derivatives in fair-value hedging relationships.
(3) Includes changes in estimated fair value of the hedged item and amortization/accretion of gains (losses) on active and discontinued fair-value hedging relationships.
(4) Excludes any offsetting interest income/expense of the associated hedged items also recorded in net interest income.
(5) For advances, AFS securities and CO bonds only.

The following table presents the components of net gains (losses) on derivatives reported in other income.

Type of Hedge	Years Ended December 31, 2021	2020	2019
Net gain (loss) on derivatives not designated as hedging instruments:			
Economic hedges:			
Interest-rate swaps	$ 13,347	$ 1,488	$ (6,950)
Swaptions	—	(324)	(1,308)
Interest-rate caps/floors	(36)	898	(784)
Interest-rate forwards	3,350	(13,377)	(1,647)
Net interest settlements [1]	(9,137)	(46,927)	(9,856)
MDCs	(3,840)	9,880	1,562
Net gains (losses) on derivatives in other income	$ 3,684	$ (48,362)	$ (18,983)

(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, hedged items in qualifying fair-value hedging relationships.

December 31, 2021	Advances	AFS Securities	CO Bonds
Amortized cost of hedged items [1]	$ 17,374,515	$ 9,007,993	$ 20,902,714
Cumulative basis adjustments included in amortized cost:			
For active fair-value hedging relationships [2]	$ 178,543	$ (184,724)	$ (247,699)
For discontinued fair-value hedging relationships	572	390,923	—
Total cumulative fair-value hedging basis adjustments on hedged items	$ 179,115	$ 206,199	$ (247,699)
December 31, 2020			
Amortized cost of hedged items [1]	$ 17,219,312	$ 9,882,225	$ 17,406,679
Cumulative basis adjustments included in amortized cost:			
For active fair-value hedging relationships [2]	$ 645,146	$ 501,865	$ 21,605
For discontinued fair-value hedging relationships	799	125,754	—
Total cumulative fair-value hedging basis adjustments on hedged items	$ 645,945	$ 627,619	$ 21,605

(1) Includes the amortized cost of the hedged items in active or discontinued fair-value hedging relationships.
(2) Excludes any offsetting effect of the net estimated fair value of the associated derivatives.

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 interest-bearing and non-interest-bearing deposits.

Type	December 31, 2021	December 31, 2020
Interest-bearing:		
Demand and overnight	$ 1,363,988	$ 1,372,863
Other	903	579
Total interest-bearing	1,364,891	1,373,442
Non-interest-bearing:		
Demand	—	258
Other [1]	1,506	1,506
Total non-interest-bearing	1,506	1,764
Total deposits	$ 1,366,397	$ 1,375,206

(1) Includes pass-through deposit reserves from members.

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, 2021 and 2020 totaled $652.9 billion and $746.8 billion, respectively. 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.

Discount Notes. The following table presents our discount notes outstanding, all of which are due within one year of issuance.

Discount Notes	December 31, 2021	December 31, 2020
Book value	$ 12,116,358	$ 16,617,079
Par value	12,117,846	16,620,486
Weighted average effective interest rate	0.05 %	0.12 %

CO Bonds. The following table presents our CO bonds outstanding by contractual maturity.

	December 31, 2021		December 31, 2020	
Year of Contractual Maturity	**Amount**	**WAIR%**	**Amount**	**WAIR%**
Due in 1 year or less	$ 14,357,350	0.29	$ 31,126,310	0.29
Due after 1 year through 2 years	2,965,510	1.02	4,109,700	0.70
Due after 2 years through 3 years	5,797,550	0.76	1,753,010	1.34
Due after 3 years through 4 years	3,947,300	0.83	767,250	1.93
Due after 4 years through 5 years	6,587,600	1.14	837,300	1.13
Thereafter	8,894,940	2.09	4,652,000	2.91
Total CO bonds, par value	42,550,250	0.96	43,245,570	0.70
Unamortized premiums	77,035		87,133	
Unamortized discounts	(11,268)		(12,703)	
Unamortized concessions	(6,746)		(8,659)	
Fair-value hedging basis adjustments, net	(247,699)		21,605	
Total CO bonds	$ 42,361,572		$ 43,332,946	

Consolidated obligations 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 LIBOR or SOFR. 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.

CO bonds may also be callable. Such bonds 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 redemption feature and the earlier of the year of contractual maturity or next call date.

Redemption Feature	**December 31, 2021**	**December 31, 2020**
Non-callable / non-putable	$ 20,346,750	$ 36,809,070
Callable	22,203,500	6,436,500
Total CO bonds, par value	$ 42,550,250	$ 43,245,570

Year of Contractual Maturity or Next Call Date	**December 31, 2021**	**December 31, 2020**
Due in 1 year or less	$ 36,028,850	$ 34,272,810
Due after 1 year through 2 years	3,122,510	4,159,700
Due after 2 years through 3 years	586,550	1,608,010
Due after 3 years through 4 years	577,300	443,750
Due after 4 years through 5 years	415,100	563,300
Thereafter	1,819,940	2,198,000
Total CO bonds, par value	$ 42,550,250	$ 43,245,570

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, 2021	December 31, 2020
Fixed-rate	$ 36,717,750	$ 24,750,570
Step-up	898,500	15,000
Simple variable-rate	4,934,000	18,480,000
Total CO bonds, par value	$ 42,550,250	$ 43,245,570

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.

The following table summarizes the activity in our AHP funding obligation.

AHP Activity	2021	2020	2019
Liability at beginning of year	$ 34,402	$ 38,084	$ 40,747
Assessment (expense)	10,720	10,717	17,071
Subsidy usage, net [1]	(14,073)	(14,399)	(19,734)
Liability at end of year	$ 31,049	$ 34,402	$ 38,084

[1] Subsidies disbursed are reported net of returns/recaptures of previously disbursed subsidies.

As a part of the AHP, each FHLBank may also provide advances to members at interest rates below then current market rates.

Note 12 - Capital

We are a cooperative whose member and former member institutions 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) 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 is automatically classified as Class B-1.

Our capital plan also permits the board of directors to authorize the issuance of Class A stock although, as of December 31, 2021, 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.

The following table presents the capital stock outstanding by sub-series.

Capital Stock Outstanding	December 31, 2021	December 31, 2020
Class B-1	$ 931,517	$ 797,196
Class B-2	1,314,684	1,410,374
Total Class B	$ 2,246,201	$ 2,207,570

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.

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.

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. If activity-based stock becomes 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) as a result of an activity no longer remaining outstanding, we may repurchase the excess stock at our discretion, subject to the statutory and regulatory 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.

Through December 31, 2021, certain members had requested redemptions of their Class B stock, but the related stock outstanding at December 31, 2021 and 2020 totaling $14,637 and $314, respectively, was not considered mandatorily redeemable and reclassified to MRCS because the requesting members may revoke their requests, without substantial penalty, throughout the five-year waiting period. Therefore, these requests are not considered sufficiently substantive in nature. However, we consider redemption requests related to mergers, acquisitions or charter terminations, as well as involuntary terminations from membership, to be sufficiently substantive when made and, therefore, the related stock is considered mandatorily redeemable and reclassified to MRCS.

Mandatorily Redeemable Capital Stock. The following table presents the activity in our MRCS.

MRCS Activity	**2021**	**2020**	**2019**
Liability at beginning of year	$ 250,768	$ 322,902	$ 168,876
Reclassification from capital stock	4,730	32,791	150,978
Reductions due to change in membership status	—	—	3,704
Redemptions/repurchases	(205,076)	(104,965)	(1,255)
Accrued distributions	—	40	599
Liability at end of year	$ 50,422	$ 250,768	$ 322,902

The following table presents 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, 2021**	**December 31, 2020**
Past contractual redemption date [(1)]	$ 577	$ 624
Year 1 [(2)]	11,835	8,650
Year 2	471	—
Year 3	9,873	26,723
Year 4	23,218	150,957
Year 5	4,448	32,791
Thereafter [(3)]	—	31,023
Total MRCS	$ 50,422	$ 250,768

(1) Balance represents Class B stock that will not be redeemed until the associated credit products and other obligations are no longer outstanding.

(2) Balance at December 31, 2021 includes $11,835 of Class B stock held by one captive insurance company whose membership was terminated on February 19, 2021 but will not be repurchased until the associated credit products and other obligations are no longer outstanding. Such amount was properly classified as "thereafter" as of December 31, 2020.

(3) Balance represents Class B stock held by two captive insurance companies whose five-year redemption period began immediately upon their respective terminations of membership on February 19, 2021. Upon their respective terminations, we repurchased their excess stock totaling $18,063. An additional $1,125 of excess stock was repurchased in September 2021.

When a member's membership status changes to a non-member, the member's capital stock is reclassified to MRCS. If such change occurs 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 MRCS.

	Years Ended December 31,		
MRCS Distributions	**2021**	**2020**	**2019**
Recorded as interest expense	$ 2,601	$ 8,594	$ 11,863
Recorded as distributions from retained earnings	97	40	599
Total	$ 2,698	$ 8,634	$ 12,462

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's capital requirements at December 31, 2021 and 2020.

	December 31, 2021		December 31, 2020	
Regulatory Capital Requirements	**Required**	**Actual**	**Required**	**Actual**
Risk-based capital	$ 1,091,337	$ 3,473,695	$ 630,661	$ 3,595,668
Total regulatory capital	$ 2,400,184	$ 3,473,695	$ 2,636,990	$ 3,595,668
Total regulatory capital-to-assets ratio	4.00%	5.79%	4.00%	5.45%
Leverage capital	$ 3,000,230	$ 5,210,543	$ 3,296,238	$ 5,393,502
Leverage ratio	5.00%	8.69%	5.00%	8.18%

Partial Recovery of Prior Capital Distribution to Financing Corporation. The Competitive Equality Banking Act of 1987 was enacted in August 1987, which, among other things, provided for the recapitalization of the Federal Savings and Loan Insurance Corporation through a newly-chartered entity, FICO. The capitalization of FICO was provided by capital distributions from the FHLBanks to FICO in 1987, 1988 and 1989 that aggregated to $680 million in exchange for FICO nonvoting capital stock. Upon passage of the Financial Institutions Reform, Recovery and Enforcement Act of 1989, the Bank's previous investment in capital stock of FICO was determined to be non-redeemable and, therefore, the Bank charged-off its prior capital distributions to FICO directly against retained earnings.

Upon the dissolution of FICO in October 2019, FICO determined that excess funds aggregating to $200 million were available for distribution to its sole stockholders, the FHLBanks. Specifically, the Bank received $10,574 during the year ended December 31, 2020 which was determined based on our proportionate ownership of FICO's nonvoting capital stock. The Bank treated the receipt of these funds as a partial recovery of the prior capital distributions made by the Bank to FICO. These funds were credited to unrestricted retained earnings.

Note 13 - Accumulated Other Comprehensive Income

The following table presents a summary of the changes in the components of AOCI.

AOCI Rollforward	Unrealized Gains (Losses) on AFS Securities	Pension Benefits	Total AOCI
Balance, December 31, 2018	$ 52,986	$ (11,299)	$ 41,687
OCI before reclassifications:			
Net change in unrealized gains	36,827	—	36,827
Reclassifications from OCI to net income:			
Pension benefits, net	—	(11,138)	(11,138)
Total other comprehensive income (loss)	36,827	(11,138)	25,689
Balance, December 31, 2019	$ 89,813	$ (22,437)	$ 67,376
OCI before reclassifications:			
Net change in unrealized gains	47,108	—	47,108
Reclassifications from OCI to net income:			
Pension benefits, net	—	(9,082)	(9,082)
Total other comprehensive income (loss)	47,108	(9,082)	38,026
Balance, December 31, 2020	$ 136,921	$ (31,519)	$ 105,402
OCI before reclassifications:			
Net change in unrealized gains	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

Note 14 - Employee Retirement and Deferred Compensation Plans

Qualified Defined Contribution Plan. The Bank participated in a tax-qualified multiple-employer retirement savings plan through October 1, 2020. Effective October 2, 2020, the Bank adopted a tax-qualified single-employer plan. The terms of such plans are substantially the same.

This DC plan covers our officers and 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, 2021, 2020 and 2019, we contributed $2,682, $2,810, and $2,778, 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 contributions to the DB Plan for the fiscal years ended December 31, 2021, 2020 and 2019 were not more than 5% of the total contributions to the DB Plan by all participating employers for the plan years ended June 30, 2020, 2019 and 2018, respectively.

Our DB Plan covers our officers and 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, 2020. 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 (100% of the present value of all benefit liabilities accrued at that date utilizing the discount rate prescribed by statute). The calculation of the funding target as of July 1, 2021, 2020 and 2019 incorporated a higher discount rate in accordance with MAP-21, which resulted in a lower funding target and a higher funded status. Over time, the favorable impact of MAP-21 is expected to 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.

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	2021	2020	2019
Net pension cost charged to compensation and benefits expense for the year ended December 31[1]	$ 5,482	$ 3,211	$ 3,500
DB Plan funded status as July 1	130 % [a]	108 % [b]	109 %
Our funded status as of July 1	126 %	104 %	109 %

(1) Includes voluntary contributions for the years ended December 31, 2021, 2020 and 2019 of $4,112, $1,944, and $2,856, respectively.

(a) The DB Plan's funded status as of July 1, 2021 is preliminary and may increase because the participating employers are permitted to make designated contributions for the plan year ended June 30, 2021 through March 15, 2022. Any such contributions will be included in the final valuation as of July 1, 2021. The final funded status as of July 1, 2021 will not be available until the Form 5500 for the plan year ended June 30, 2022 is filed (no later than April 2023).

(b) The DB Plan's final funded status as of July 1, 2020 will not be available until the Form 5500 for the plan year ended June 30, 2021 is filed (no later than April 2022).

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	2021	2020	2019
Projected benefit obligation at beginning of year	$ 58,330	$ 42,719	$ 27,593
Service cost	3,528	2,489	1,636
Interest cost	1,067	1,086	1,039
Actuarial loss	119	12,551	13,079
Benefits paid	(523)	(515)	(628)
Settlements	(5,665)	—	—
Plan amendment	(6,279)	—	—
Projected benefit obligation at end of year	$ 50,577	$ 58,330	$ 42,719

The actuarial 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 amendment to the SERP was adopted to enhance the retention of key employees by providing greater predictability of the dollar amount of benefits payable upon separation of employment or retirement from the Bank. The amendment substantially reduces fluctuations of the dollar value of the retirement benefits because the applicable retirement plan interest rates and mortality tables used to calculate benefits were set as of specific dates in 2021 rather than as of the employee’s date of separation of employment or retirement.

The following table presents the key assumptions used in the actuarial calculations of the benefit obligation.

	December 31,		
	2021	2020	2019
Discount rate	2.29 %	1.54 %	2.55 %
Compensation increases	5.50 %	5.50 %	5.50 %

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, 2021 and 2020 was $36,545 and $42,739, 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, 2021 and 2020 of $55,008 and $45,200, respectively.

The following table presents the components of the net periodic benefit cost for the SERP.

	Years Ended December 31,		
	2021	**2020**	**2019**
Net periodic benefit cost:			
Service cost	$ 3,528	$ 2,489	$ 1,636
Total recognized in compensation and benefits	3,528	2,489	1,636
Interest cost	1,067	1,086	1,039
Amortization of net actuarial loss	3,706	3,469	1,941
Accelerated amortization of net actuarial loss due to settlements	2,769	—	—
Total recognized in other expenses	7,542	4,555	2,980
Total net periodic benefit cost recognized in income before assessments	11,070	7,044	4,616
Pension benefits recognized in OCI:			
Actuarial loss	119	12,551	13,079
Amortization of net actuarial loss	(3,706)	(3,469)	(1,941)
Accelerated amortization of net actuarial loss due to settlements	(2,769)	—	—
Past service credit due to plan amendment	(6,279)	—	—
Net pension benefits recognized in OCI	(12,635)	9,082	11,138
Total recognized as net periodic benefit cost	$ (1,565)	$ 16,126	$ 15,754

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,		
	2021	**2020**	**2019**
Discount rate [1]	2.06 %	2.55 %	3.64 %
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.

The following table presents the components of the pension benefits reported in AOCI for the SERP.

	December 31, 2021	December 31, 2020
Net actuarial loss	$ (25,163)	$ (31,519)
Past service credit due to plan amendment	6,279	—
Net pension benefits reported in AOCI	$ (18,884)	$ (31,519)

The net periodic benefit cost for the SERP, including the net amount to be amortized, for the year ending December 31, 2022 is projected to be approximately $5,450.

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.

For the Years Ending December 31,	
2022	$ 21,919
2023	1,479
2024	1,598
2025	2,048
2026	2,233
2027 - 2031	14,817

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 difference, or 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 difference, or 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 assessments related to AHP have been allocated to each segment based upon its proportionate share of income before assessments.

The following table presents our financial performance by operating segment.

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

Year Ended December 31, 2020	Traditional	Mortgage Loans	Total
Net interest income	$ 253,683	$ 9,687	$ 263,370
Provision for (reversal of) credit losses	—	140	140
Other income (loss)	(52,262)	(3,254)	(55,516)
Other expenses	92,953	16,181	109,134
Income (loss) before assessments	108,468	(9,888)	98,580
Affordable Housing Program assessments (credits)	11,706	(989)	10,717
Net income (loss)	$ 96,762	$ (8,899)	$ 87,863

Year Ended December 31, 2019	Traditional	Mortgage Loans	Total
Net interest income	$ 181,367	$ 55,875	$ 237,242
Provision for (reversal of) credit losses	—	(289)	(289)
Other income (loss)	20,166	143	20,309
Other expenses	84,638	14,356	98,994
Income before assessments	116,895	41,951	158,846
Affordable Housing Program assessments	12,876	4,195	17,071
Net income	$ 104,019	$ 37,756	$ 141,775

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.

By Date	Traditional	Mortgage Loans	Total
December 31, 2021	$ 52,388,469	$ 7,616,134	$ 60,004,603
December 31, 2020	57,409,111	8,515,645	65,924,756

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, 2021, 2020, or 2019.

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, 2021					
		Estimated Fair Value				
Financial Instruments	**Carrying Value**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Netting Adjustments** [1]
Assets:						
Cash and due from banks	$ 867,880	$ 867,880	$ 867,880	$ —	$ —	$ —
Interest-bearing deposits	100,041	100,041	100,000	41	—	—
Securities purchased under agreements to resell	3,500,000	3,500,000	—	3,500,000	—	—
Federal funds sold	2,580,000	2,580,000	—	2,580,000	—	—
Trading securities	3,946,799	3,946,799	—	3,946,799	—	—
AFS securities	9,159,935	9,159,935	—	9,159,935	—	—
HTM securities	4,313,773	4,322,157	—	4,322,157	—	—
Advances	27,497,835	27,462,295	—	27,462,295	—	—
Mortgage loans held for portfolio, net	7,616,134	7,810,378	—	7,787,334	23,044	—
Accrued interest receivable	80,758	80,758	—	80,758	—	—
Derivative assets, net	220,202	220,202	—	106,926	—	113,276
Grantor trust assets [2]	62,640	62,640	62,640	—	—	—
Liabilities:						
Deposits	1,366,397	1,366,397	—	1,366,397	—	—
Consolidated obligations:						
Discount notes	12,116,358	12,115,318	—	12,115,318	—	—
Bonds	42,361,572	42,643,536	—	42,643,536	—	—
Accrued interest payable	88,068	88,068	—	88,068	—	—
Derivative liabilities, net	12,185	12,185	—	413,776	—	(401,591)
MRCS	50,422	50,422	50,422	—	—	—

	December 31, 2020					
		Estimated Fair Value				
Financial Instruments	**Carrying Value**	**Total**	**Level 1**	**Level 2**	**Level 3**	**Netting Adjustments** [1]
Assets:						
Cash and due from banks	$ 1,811,544	$ 1,811,544	$ 1,811,544	$ —	$ —	$ —
Interest-bearing deposits	100,026	100,026	100,000	26	—	—
Securities purchased under agreements to resell	2,500,000	2,500,000	—	2,500,000	—	—
Federal funds sold	1,215,000	1,215,000	—	1,215,000	—	—
Trading securities	5,094,703	5,094,703	—	5,094,703	—	—
AFS securities	10,144,899	10,144,899	—	10,144,899	—	—
HTM securities	4,701,302	4,723,796	—	4,723,796	—	—
Advances	31,347,486	31,290,664	—	31,290,664	—	—
Mortgage loans held for portfolio, net	8,515,645	8,922,185	—	8,860,853	61,332	—
Accrued interest receivable	103,076	103,076	—	103,076	—	—
Derivative assets, net	283,082	283,082	—	20,557	—	262,525
Grantor trust assets [2]	51,032	51,032	51,032	—	—	—
Liabilities:						
Deposits	1,375,206	1,375,206	—	1,375,206	—	—
Consolidated obligations:						
Discount notes	16,617,079	16,617,976	—	16,617,976	—	—
Bonds	43,332,946	43,952,206	—	43,952,206	—	—
Accrued interest payable	63,581	63,581	—	63,581	—	—
Derivative liabilities, net	22,979	22,979	—	762,997	—	(740,018)
MRCS	250,768	250,768	250,768	—	—	—

(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, 2021 and 2020, 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.

Impaired Mortgage Loans Held for Portfolio. We record non-recurring fair value adjustments to reflect partial charge-offs on impaired mortgage loans. We estimate the fair value of these assets using a current property value obtained from a third-party.

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 LIBOR or OIS 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:

- LIBOR curve or the OIS/SOFR curve, as applicable, to project cash flows for collateralized interest-rate swaps and the OIS/SOFR curve only to discount those cash flows; 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.

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, 2021	Total	Level 1	Level 2	Level 3	Netting Adjustments [1]
Trading securities:					
U.S. Treasury securities	$ 3,946,799	$ —	$ 3,946,799	$ —	$ —
Total trading securities	3,946,799	—	3,946,799	—	—
AFS securities:					
GSE and TVA debentures	2,697,116	—	2,697,116	—	—
GSE multifamily MBS	6,462,819	—	6,462,819	—	—
Total AFS securities	9,159,935	—	9,159,935	—	—
Derivative assets:					
Interest-rate related	220,157	—	106,881	—	113,276
MDCs	45	—	45	—	—
Total derivative assets, net	220,202	—	106,926	—	113,276
Other assets:					
Grantor trust assets	62,640	62,640	—	—	—
Total assets at recurring estimated fair value	$ 13,389,576	$ 62,640	$ 13,213,660	$ —	$ 113,276
Derivative liabilities:					
Interest-rate related	$ 12,080	$ —	$ 413,671	$ —	$ (401,591)
MDCs	105	—	105	—	—
Total derivative liabilities, net	12,185	—	413,776	—	(401,591)
Total liabilities at recurring estimated fair value	$ 12,185	$ —	$ 413,776	$ —	$ (401,591)
Mortgage loans held for portfolio [2]	$ 1,141	$ —	$ —	$ 1,141	$ —
Total assets at non-recurring estimated fair value	$ 1,141	$ —	$ —	$ 1,141	$ —

December 31, 2020	Total	Level 1	Level 2	Level 3	Netting Adjustments [1]
Trading securities:					
U.S. Treasury securities	$ 5,094,703	$ —	$ 5,094,703	$ —	$ —
Total trading securities	5,094,703	—	5,094,703	—	—
AFS securities:					
GSE and TVA debentures	3,503,137	—	3,503,137	—	—
GSE multifamily MBS	6,641,762	—	6,641,762	—	—
Total AFS securities	10,144,899	—	10,144,899	—	—
Derivative assets:					
Interest-rate related	282,060	—	19,535	—	262,525
MDCs	1,022	—	1,022	—	—
Total derivative assets, net	283,082	—	20,557	—	262,525
Other assets:					
Grantor trust assets	51,032	51,032	—	—	—
Total assets at recurring estimated fair value	$ 15,573,716	$ 51,032	$ 15,260,159	$ —	$ 262,525
Derivative liabilities:					
Interest-rate related	$ 22,979	$ —	$ 762,997	$ —	$ (740,018)
MDCs	—	—	—	—	—
Total derivative liabilities, net	22,979	—	762,997	—	(740,018)
Total liabilities at recurring estimated fair value	$ 22,979	$ —	$ 762,997	$ —	$ (740,018)
Mortgage loans held for portfolio [3]	$ 1,460	$ —	$ —	$ 1,460	$ —
Total assets at non-recurring estimated fair value	$ 1,460	$ —	$ —	$ 1,460	$ —

(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) Amounts are as of the date the fair-value adjustment was recorded during the year ended December 31, 2021.
(3) Amounts are as of the date the fair-value adjustment was recorded during the year ended December 31, 2020.

Note 17 - Commitments and Contingencies

The following table presents our off-balance-sheet commitments at their notional amounts.

	December 31, 2021		
Type of Commitment	Expire within one year	Expire after one year	Total
Standby letters of credit outstanding	$ 39,022	$ 373,694	$ 412,716
Unused lines of credit [1]	879,035	—	879,035
Commitments to fund additional advances [2]	38,000	—	38,000
Commitments to fund or purchase mortgage loans, net [3]	96,424	—	96,424
Unsettled CO bonds, at par	30,000	—	30,000

(1) Maximum line of credit amount per member is $100,000.
(2) Generally for periods up to six months.
(3) 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. Substantially all of these standby letters of credit, including related commitments, range from 3 months to 20 years, although some are renewable at our option. The carrying value of guarantees (commitment fees) related to standby letters of credit is recorded in other liabilities and totaled $12,796 at December 31, 2021.

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 Fund or Purchase Mortgage Loans. Commitments that unconditionally obligate us to fund or 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. At December 31, 2021 and 2020, we had pledged cash collateral of $515,740 and $1,003,380, respectively, to counterparties and clearing agents. At December 31, 2021 and 2020, we had not pledged any securities as collateral.

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 16 - Estimated Fair Values*.

Note 18 - Related Party and Other Transactions

We are a cooperative whose members and former members (or legal successors) own all of our outstanding capital stock. Former members (including certain non-members) are required to maintain their investment in our capital stock until their outstanding business transactions with us have matured or are paid off and their capital stock is redeemed in accordance with our capital plan and regulatory requirements. 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, 2021. 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.

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	**2021**	**2020**	**2019**
Net capital stock issuances (redemptions and repurchases)	$ 7,213	$ 80,088	$ 6,729
Net advances (repayments)	(1,581,708)	346,863	203,078
Mortgage loan purchases	58,830	48,394	30,610

The following table presents the aggregate balances of capital stock and advances outstanding for directors' financial institutions and their balances as a percent of the total balances on our statement of condition.

	December 31, 2021		December 31, 2020	
Balances with Directors' Financial Institutions	**Par value**	**% of Total**	**Par value**	**% of Total**
Capital stock	$ 440,949	19 %	$ 426,003	17 %
Advances	3,854,856	14 %	5,397,433	18 %

The par values at December 31, 2021 reflect changes in the composition of directors' financial institutions effective January 1, 2021, due to changes in board membership resulting from the 2020 director election.

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. There were no loans to or borrowings from other FHLBanks that remained outstanding at December 31, 2021 or 2020.

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

2005 SERP: Federal Home Loan Bank of Indianapolis 2005 Supplemental Executive Retirement Plan, as amended
advance: Secured loan to members, former members or Housing Associates
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
CARES Act: Coronavirus Aid, Relief and Economic Security Act
CDFI: Community Development Financial Institution
CFI: Community Financial Institution, an FDIC-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
CFTC: United States Commodity Futures Trading Commission
Clearinghouse: A United States Commodity Futures Trading Commission-registered derivatives clearing organization
CME: CME Clearing
CMO: Collateralized Mortgage Obligation
CO bond: Consolidated Obligation bond
COVID-19: Coronavirus Disease 2019 and its variants
DB Plan: Pentegra Defined Benefit Pension Plan for Financial Institutions, as amended
DC Plan: Collectively, the Pentegra Defined Contribution Retirement Savings Plan for Financial Institutions, as amended, in effect through October 1, 2020 and the Federal Home Loan Bank of Indianapolis Retirement Savings Plan, commencing October 2, 2020
DDCP: Directors' Deferred Compensation Plan
Dodd-Frank Act: Dodd-Frank Wall Street Reform and Consumer Protection Act, as amended
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
FCA: United Kingdom Financial Conduct Authority
FDIC: Federal Deposit Insurance Corporation
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
Final Membership Rule: Final Rule on FHLBank Membership issued by the Finance Agency effective February 19, 2016
Finance Agency: Federal Housing Finance Agency
FINRA: Financial Industry Regulatory Authority
FLA: First Loss Account
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
Frozen SERP: Federal Home Loan Bank of Indianapolis Supplemental Executive Retirement Plan, frozen effective December 31, 2004
GAAP: Generally Accepted Accounting Principles in the United States of America
Ginnie Mae: Government National Mortgage Association
GLB Act: Gramm-Leach-Bliley Act of 1999, as amended
GSE: United States Government-Sponsored Enterprise
HERA: Housing and Economic Recovery Act of 2008, as amended
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
HUD: United States Department of Housing and Urban Development

JCE Agreement: Joint Capital Enhancement Agreement, as amended, among the 11 FHLBanks
LCH: LCH.Clearnet LLC
LIBOR: London Interbank Offered Rate
LRA: Lender Risk Account
LTV: Loan-to-Value
MAP-21: Moving Ahead for Progress in the 21st Century Act, enacted on July 6, 2012
MBS: Mortgage-Backed Securities
MCC: Master Commitment Contract
MDC: Mandatory Delivery Commitment
Moody's: Moody's Investor Services
MPF: Mortgage Partnership Finance®
MPP: Mortgage Purchase Program, including Original and Advantage unless indicated otherwise
MRCS: Mandatorily Redeemable Capital Stock
MVE: Market Value of Equity
NRSRO: Nationally Recognized Statistical Rating Organization
OCC: Office of the Comptroller of the Currency
OCI: Other Comprehensive Income (Loss)
OIS: Overnight-Indexed Swap
ORERC: Other Real Estate-Related Collateral
OTTI: Other-Than-Temporary Impairment or -Temporarily Impaired (as the context indicates)
PFI: Participating Financial Institution
PMI: Primary Mortgage Insurance
REMIC: Real Estate Mortgage Investment Conduit
REO: Real Estate Owned
RMBS: Residential Mortgage-Backed Securities
S&P: Standard & Poor's Rating Service
Safety and Soundness Act: Federal Housing Enterprises Financial Safety and Soundness Act of 1992, as amended
SBA: Small Business Administration
SEC: Securities and Exchange Commission
Securities Act: Securities Act of 1933, as amended
SERP: Collectively, the 2005 SERP and the Frozen SERP
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
TDR: Troubled Debt Restructuring
TVA: Tennessee Valley Authority
UPB: Unpaid Principal Balance
VaR: Value at Risk
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, 2021, 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, 2021. For Management's Report on Internal Control over Financial Reporting and the Report of Independent Registered Public Accounting Firm, see *Item 8. Financial Statements*.

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.

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 2, 2021 provides that we have 17 seats on our board of directors for 2022, consisting of five Indiana member directors, four Michigan member directors, and eight 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 2021 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 policies and procedures shall (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 an independent director from serving as a director, officer, or employee of a member of the FHLBank on whose board the director sits, or of a recipient of an advance from that FHLBank, or as an officer of any FHLBank, and also prohibit the nomination or election as an independent director of an individual serving in any such capacity.

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 "Resources," "Corporate Governance" and "Board of Directors." 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 slated independent director candidates to the Finance Agency for review and comment. Once the Finance Agency has accepted candidates for the independent director positions, we hold a district-wide election 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.

2021 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 2021 was the fourth quarter election of two independent directors and two Indiana member directors. No meeting of the members was held with regard to the 2021 election. The 2021 election was conducted in accordance with the Bank Act and Finance Agency regulations.

Board of Directors Vacancies. If a vacancy occurs on an FHLBank's board of directors, the board, by a majority vote of the remaining directors, shall elect an individual to fill the unexpired term of office of the vacant directorship. Any individual so elected must satisfy all eligibility requirements of the Bank Act and Finance Agency regulations applicable to his or her predecessor. Before an election to fill a vacant directorship occurs, the FHLBank must obtain an executed eligibility certification form from each individual being considered to fill the vacancy, and must verify each individual's eligibility. The FHLBank must also verify the qualifications of any potential independent director. Before electing an independent director, the FHLBank 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, the FHLBank must send a notice to its 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 are listed in the table below:

Name	Age	Director Since	Term Expiration	Independent (elected by District) or Member (elected by State)
Dan L. Moore, Chair [1]	71	1/1/2011	12/31/2022	Member (IN)
Karen F. Gregerson, Vice Chair [1]	61	1/1/2013	12/31/2024	Member (IN)
Brian D. J. Boike	45	1/1/2020	12/31/2023	Member (MI)
Michael E. Bosway	63	1/1/2022	12/31/2025	Independent
Clifford M. Clarke	58	1/1/2021	12/31/2024	Member (IN)
Lisa D. Cook	57	1/1/2021	12/31/2024	Independent
Charlotte C. Decker	57	1/1/2017	12/31/2024	Independent
Robert M. Fisher	61	1/1/2019	12/31/2022	Member (MI)
Perry G. Hines	59	1/1/2022	12/31/2025	Independent
Jeffrey G. Jackson	51	1/1/2019	12/31/2022	Member (MI)
Robert D. Long	67	4/24/2007	12/31/2023	Independent
Michael J. Manica	73	1/1/2016	12/31/2023	Member (MI)
Larry W. Myers	63	1/1/2018	12/31/2025	Member (IN)
Christine Coady Narayanan [2]	58	1/1/2008	12/31/2023	Independent
Sherri L. Reagin	55	1/1/2022	12/31/2025	Member (IN)
Todd E. Sears [3]	53	1/1/2021	12/31/2024	Independent
Larry A. Swank	79	1/1/2009	12/31/2022	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 20, 2020, our board elected Mr. Moore as Chair and Ms. Gregerson as Vice Chair for 2021-2022.

(2) Public Interest Director designation, effective May 15, 2014, throughout current term.

(3) Public Interest Director designation, effective January 1, 2021, throughout current term.

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.

Dan L. Moore joined the board in 2011 and has served as Chair since 2019. Mr. Moore is the Chair of Home Bank SB in Martinsville, Indiana, and he has served solely in that position since 2021. Previously, he served as its Chair, President and CEO from 2020-2021, after having served as its President, CEO and director beginning in 2006. Prior to that time, Mr. Moore served as that bank's Executive Vice President and Chief Operating Officer. Mr. Moore has been employed by Home Bank SB since 1978. Mr. Moore holds an appointed position on the Mutual Institution Advisory Board of the Office of the Comptroller of the Currency. He also serves on the board of directors of Stability First, a not-for-profit organization in Martinsville, Indiana, established to address issues associated with the alleviation of poverty. He also sits on the board of Hoosier Voices for I-69, a public advocacy coalition. He holds a bachelor of science degree from Indiana State University and a master of science degree in management from Indiana Wesleyan University. He currently serves as the Chair of the Council of Federal Home Loan Banks, the nonprofit trade association for the FHLBank System.

Karen F. Gregerson joined the board in 2013, and currently serves as Vice-Chair. Ms. Gregerson is the President and CEO of The Farmers Bank in Frankfort, Indiana, and President of The Farmers Bancorp, a bank holding company in Frankfort, Indiana, having been appointed to each of positions in 2016. She is also a director of both entities. 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. 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. The board of directors has determined that Ms. Gregerson is an Audit Committee Financial Expert due primarily to her experience as a director, CEO and Chief Financial Officer of a commercial bank and as a CPA.

Brian D. J. Boike is the Executive Vice President and Treasurer of Flagstar Bank, FSB, a subsidiary of Flagstar Bancorp, an NYSE-listed bank holding company located in Troy, Michigan, and has held that position since 2014. Prior to that, Mr. Boike was Senior Vice President & Director of Capital Planning and Stress Testing of FirstMerit Bank, a subsidiary of FirstMerit Corporation, from 2013-2014. Previously, he was the Senior Vice President & Treasurer of Citizens Bank, a subsidiary of Citizens Republic Bancorp, Inc. in Flint, Michigan (acquired by FirstMerit Corporation in 2013), from 2009-2013 and prior to that, Vice President & Asset Liability Manager of Citizens Bank from 2004-2009. Mr. Boike holds a bachelor of arts degree in economics from the University of Michigan and a master of arts in political economy degree from Boston University. Mr. Boike is also a CFA® charterholder.

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.

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 Alexandria, Virginia, 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.

Lisa D. Cook, PhD, is a Professor of Economics and International Relations, a position she has held since 2005, at Michigan State University in East Lansing, Michigan where she also served as Director of the American Economic Association Summer Program from 2018-2020, and was elected to the Executive Committee of the American Economic Association for 2019. Dr. Cook was President of the National Economic Association from 2015-2016 and served in the White House Council of Economic Advisers during 2011 and 2012. She is a Research Associate at the National Bureau for Economic Research and has previously held visiting appointments at the University of Michigan and at the Federal Reserve Banks of Chicago, Minneapolis, New York, and Philadelphia. Dr. Cook currently serves as an Opportunity and Inclusive Growth Institute Advisory Board Member for the Federal Reserve Bank of Minneapolis and as a member of the Board of Directors for Rende Progress Capital CDFI. She also currently serves as a Class B Director for the Federal Reserve Bank of Chicago serving a three year term through 2024. Dr. Cook holds bachelors of arts degrees from each of Spelman College and St. Hilda's College, Oxford University and a PhD in economics from the University of California, Berkeley.

Charlotte C. Decker 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. Decker 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. Decker 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.

Robert M. Fisher is President - CEO of Lake-Osceola State Bank in Baldwin, Michigan, and has held that position since 2018. He also serves as the Vice Chair of that bank's board of directors, and is the President and Secretary of Lake Financial Holding Company, Baldwin, Michigan, its bank holding company. 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 12 years. Mr. Fisher holds a bachelor of business leadership degree from Baker College. The board of directors has determined that Mr. Fisher is an Audit Committee Financial Expert due primarily to his experience as President - CEO and Chief Operating Officer of a commercial bank.

Perry G. Hines is 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. He also serves as the Chief Development Officer of Wheeler Mission in Indianapolis, Indiana and has held that position since May 2021. 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, IN. During his tenure, he also oversaw the Irwin Mortgage Corporation Foundation, which provided grant dollars to organization 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 and the Goodwill Industries of Central Indiana. 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.

Jeffrey G. Jackson is the Chief Lending Officer of Michigan State University Federal Credit Union, in East Lansing, Michigan, and has held that position since 2015. Prior to that appointment, Mr. Jackson was Senior Vice President - Business Lending and Operations during 2015 and Vice President - Payment Systems and Support Services from 2012-2014. He has also held officer positions in Member Services, Finance and Internal Audit since he began employment with Michigan State University Federal Credit Union in 1997. Before joining that institution, he held positions with public accounting firms. Mr. Jackson also serves on the board of directors of Child and Family Charities, and previously served on the board of directors of the Michigan Credit Union Foundation, both located in Lansing, Michigan. Mr. Jackson is a CPA. He holds a bachelor of business administration degree from the University of Michigan, and a master of business administration degree from Michigan State University. The board of directors has determined that Mr. Jackson is an Audit Committee Financial Expert primarily due to his experience as an officer of a financial institution and his experience in public accounting. In February 2022, Mr. Jackson advised the Bank of his intention to retire, and therefore resign, as an officer of Michigan State University Federal Credit Union in August 2022. On the effective date of his resignation, Mr. Jackson will become ineligible to serve on the board as a member director.

Robert D. Long retired from KPMG LLP on December 31, 2006, where he had been the Office Managing Partner in the Indianapolis, Indiana office since 1999, and had served as an audit partner since 1988. As an audit partner, Mr. Long served a number of companies with public, private and cooperative ownership structures in a variety of industries, including banking, finance and insurance. Mr. Long is a CPA. Mr. Long served on the board of Celadon Group, Inc., a transportation and logistics company, from 2014-2021, including serving as its Audit Committee Chair and Audit Committee financial expert from 2014 through the termination of such Committee in 2019. From 2010-2015, Mr. Long was a member of the board and Chair of the Audit Committee for Beefeaters Holding Company, Inc., a pet food company. He holds a bachelor of science degree from Indiana University. The board of directors has determined that Mr. Long is an Audit Committee Financial Expert due primarily to his previous experience as an audit partner at a major public accounting firm and as the Audit Committee Chair of multiple companies.

Michael J. Manica is the Vice Chair and a director of United Bank Financial Corporation, a bank holding company, and is Vice Chair and a director of its banking subsidiary, United Bank of Michigan, in Grand Rapids, Michigan, and has held those positions since 2019. Before his appointments as Vice Chair, Mr. Manica had served as a director and President and CEO of those entities beginning in 2014. His career with United Bank of Michigan began in 1980. He holds a bachelor of arts degree in economics from the University of Michigan and completed the Graduate School of Banking program at the University of Wisconsin.

Larry W. Myers is the President and CEO of First Savings Financial Group, Inc., a bank holding company, and its banking subsidiary, First Savings Bank, in Clarksville, Indiana, and has held those positions since 2009 and 2007, respectively. Previously 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 35 years' experience in retail banking, commercial lending and wealth management. Mr. Myers has served as Chair of the Indiana Bankers Association and currently serves on the Community Bank Council and the FHLBank Committee of the American Bankers Association. 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 and a master of business administration degree, both from the University of Kentucky. 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.

Christine Coady Narayanan is the President and CEO of Opportunity Resource Fund, a U.S. Treasury-certified CDFI with offices in Lansing, Grand Rapids, and Detroit, Michigan, having served in that position since 2004. Opportunity Resource Fund is a non-profit CDFI that provides social impact investment opportunities for individuals and corporations throughout Michigan and engages in lending for affordable housing and community development purposes. Ms. Narayanan has held various positions with the Opportunity Resource Fund and its predecessor organization since 1989, and served as its Executive Director from 1997-2004. She also serves as Chair of the Board of the Detroit CDFI Coalition. She holds an associate degree from Lansing Community College and a bachelor of arts degree from Spring Arbor University. Ms. Narayanan is a graduate of the National Internship in Community Economic Development and Michigan Municipal League's Elected Officials Academy and has completed certification through the Indiana University Center of Philanthropy. She holds a Certificate of Strategic Perspectives in Nonprofit Management from the Harvard Business School’s Executive Education.

Sherri L. Reagin is Executive Vice President and Chief Financial Officer of the North Salem Bank in North Salem, Indiana, and has served in such position since 2011. She also serves as the Investment Officer and Board Member of NSSB Investments, Inc., a position she has held since 2013. She serves as the national representative for community banks on the U.S. Coin Task Force, a group selected by the Federal Reserve to address the coin circulation challenges resulting from the pandemic. She has served as a member of the Independent Community Bankers of America Payments and Operations Committee since 2017. Ms. Reagin serves on the board of the Hendricks County Community Foundation. Ms. Reagin holds a bachelor’s degree in human resources and management from Indiana University and a Certificate of Executive Leadership from the University of Wisconsin-Madison’s Graduate School of Banking. She is a CPA.

Todd E. Sears is the Director of Investment Strategy and Chief Financial Officer of Valeo Financial Advisors, a registered investment advisor based in Indiana, a position he has held since February 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. The board of directors has determined that Mr. Sears is an Audit Committee Financial Expert due primarily to his CFA® and Chartered Alternative Investment Analyst designations, his experience serving as a Chief Financial Officer, and his educational background.

Larry A. Swank is Founder, CEO and Chair of Sterling Group, Inc. and affiliated companies in Mishawaka, Indiana. Mr. Swank has served as Chair and CEO of Sterling Group, Inc. since 1976, and served as its President until July 2012. The principal business of that company and its affiliates involves the acquisition, development, construction and management of multi-family housing and storage units. Mr. Swank has served as a director of the National Association of Home Builders since 1973 and served as a member of its Executive Board for several terms. He also served as Chair of that association's Housing Finance Committee on three separate occasions.

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 ("Filing Date"), as well as whether the director is the Chair (C), Vice Chair (VC), member (x), or Ex-Officio member (EO).

Name	Affordable Housing	Audit	Executive/ Governance	Finance/ Budget	Human Resources	Risk Oversight	Succession Planning	Technology
Dan L. Moore	EO	EO	C	EO	EO	EO	EO	EO
Karen F. Gregerson		X	VC		X			
Brian D. J. Boike				X	X	X		
Michael E. Bosway					X	VC		X
Clifford M. Clarke				X	X		X	VC
Lisa D. Cook				VC		X		X
Charlotte C. Decker		X	X					C
Robert M. Fisher			X	X	C		X	
Perry G. Hines	X			X	X		VC	
Jeffrey G. Jackson		VC		X		X		
Robert D. Long		C	X					X
Michael J. Manica	X		X	C			X	
Larry W. Myers		X	X			C		
Christine Coady Narayanan	X		X				C	
Sherri L. Reagin		X			VC	X		
Todd E. Sears	VC	X						X
Larry A. Swank	C		X	X			X	

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 2021:

Robert D. Long, Chair, independent director
Jeffrey G. Jackson, Vice Chair
Robert M. Fisher
Karen F. Gregerson
Larry W. Myers
Christine Coady Narayanan, independent director
Todd E. Sears, independent director
Dan L. Moore, 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 by scrolling to the bottom of any web page on www.fhlbi.com and then selecting "Corporate Governance" in the navigation menu. 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, including cybersecurity. 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 any investigation.

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. During 2021, the Audit Committee met 13 times and, among other matters, also:

- reviewed the scope of and overall plans for the external and internal audit programs;
- reviewed and recommended board approval of our policy with regard to 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, and board of directors, 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. The Audit Committee engages in thorough evaluations each year when appointing an independent auditor. In connection with the appointment of the Bank's independent auditor, the Audit Committee's evaluation included consultation with the Audit Committees of the other FHLBanks and the Office of Finance. In the course of these evaluations, the Audit Committee 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 amount of fees paid to PwC for audit, audit-related and other services. Audit fees represent fees for professional services provided 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, 2021.

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, 2021, for filing with the SEC.

Audit Committee Financial Experts. On July 22, 2021, our board of directors determined that Audit Committee Chair Robert D. Long, Audit Committee Vice Chair Jeffrey G. Jackson, and Audit Committee members Robert M. Fisher, Karen F. Gregerson, Larry W. Myers, and Todd E. Sears 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]	65	President - Chief Executive Officer ("CEO")
Brendan W. McGrath [2]	44	Executive Vice President - Chief Risk Officer ("CRO")
Deron J. Streitenberger [3]	54	Executive Vice President - Chief Business Operations Officer ("CBOO")
Gregory L. Teare [4]	68	Executive Vice President - Chief Financial Officer ("CFO")
Chad A. Brandt [5]	57	Senior Vice President - Treasurer
Shaun H. Clifford [6]	61	Senior Vice President - General Counsel and Chief Compliance Officer (Ethics Officer)
Kristina L. Cunningham [7]	46	Senior Vice President - Senior Director of Compliance & Operational Risk Analysis
Christopher Dawson [8]	45	Senior Vice President - Chief Information Officer
Jonathan W. Griffin [9]	51	Senior Vice President - Chief Business Development Officer
Kania D. Lottie [10]	40	Senior Vice President - Chief Human Resources and Diversity, Equity, & Inclusion Officer (Ethics Officer)
Gregory J. McKee [11]	48	Senior Vice President - Chief Internal Audit Officer
K. Lowell Short, Jr. [12]	65	Senior Vice President - Chief Accounting Officer ("CAO")
Mary Beth Wott [13]	57	Senior Vice President - Community Investment & Underwriting/Collateral Operations 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 and in Washington, D.C.

(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, and Vice President - Director of Operational Risk Analysis in March 2016. 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 was appointed Vice President - Director of Human Resources effective January 2016 . 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. Short was appointed Senior Vice President - CAO in August 2009. Mr. Short holds an MBA and is a CPA.

[13] Ms. Wott was appointed to Senior Vice President - Community Investment & Underwriting/Collateral Operations Officer in 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. 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 Codes of Conduct and the Code of Ethics are available on our website by scrolling to the bottom of any web page on www.fhlbi.com and then selecting "Corporate Governance" in the navigation menu. Interested persons may also request a copy of the Codes of Conduct and the Code of Ethics by contacting us, Attention: Corporate Secretary, 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 Committee ("HR Committee") is a standing committee that serves as the Compensation Committee of the board of directors and is comprised solely of directors. No officers or employees of our Bank serve on the HR Committee, nor do any Bank officers serve as directors of any member institution or of any other entity, one of whose officers is a director of our Bank. Further, no director serving on the HR Committee has ever been an officer of our Bank or had any other relationship that would be disclosable under Item 404 of SEC Regulation S-K.

Compensation Committee Report

The HR Committee has reviewed and discussed with Bank management the "Compensation Discussion and Analysis" that follows and, based on such review and discussions, has by resolution recommended to our board of directors that the Compensation Discussion and Analysis be included in our Form 10-K for 2021.

For the years indicated, the HR Committee was/is comprised of the following directors:

Name	2021	2022
Robert M. Fisher	Chair	Chair
Sherri L. Reagin		Vice Chair
Brian D.J. Boike	Member	Member
Michael E. Bosway		Member
Ronald Brown	Vice Chair	
Clifford M. Clarke	Member	Member
Karen F. Gregerson		Member
Michael J. Hannigan, Jr.	Member	
Perry G. Hines		Member
James L. Logue, III	Member	
Dan L. Moore	Ex-Officio	Ex-Officio

Compensation Discussion and Analysis

Overview. To provide perspective on our compensation programs and practices for our Named Executive Officers ("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. Our NEOs for 2021 consisted of (i) individuals who served as our principal executive officer ("PEO") during such year, (ii) individuals who served as our principal financial officer ("PFO") during such year, and (iii) the three most highly compensated officers (other than the officers who served as PEO or PFO) who were serving as Executive Officers at the end of 2021. The following persons were our NEOs for 2021.

NEO	Title
Cindy L. Konich	President - Chief Executive Officer ("CEO") - PEO
Gregory L. Teare	Executive Vice President - Chief Financial Officer ("CFO") - PFO
Brendan W. McGrath	Executive Vice President - Chief Risk Officer ("CRO")
Deron J. Streitenberger	Executive Vice President - Chief Business Operations Officer ("CBOO")
K. Lowell Short, Jr.	Senior Vice President - Chief Accounting Officer ("CAO")

Our executive compensation program is overseen by the Executive/Governance Committee (with respect to the President - 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 (eight times in 2021) 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 (nine times in 2021) and reports its recommendations to the board.

Regulation of Executive Compensation.

Bank Act and Finance Agency Executive Compensation Rule. Because we are a GSE, our executive compensation programs are subject to regulation by the Finance Agency. The Safety and Soundness Act and the Finance Agency's rule on executive compensation ("Executive Compensation Rule") provide the Finance Agency Director with the authority to prevent the FHLBanks from paying compensation to executive officers that is not "reasonable and comparable" to compensation for employment paid at institutions of similar size and function for similar duties and responsibilities. While the Safety and Soundness Act and the Executive Compensation Rule prohibit the Director from setting specific levels or ranges of compensation for FHLBank executive officers, the Executive Compensation Rule does authorize the Director to identify relevant factors for determining whether executive compensation is reasonable and comparable. Such factors include but are not limited to: (i) duties and responsibilities of the position; (ii) compensation factors that indicate added or diminished risks, constraints, or aids in carrying out the responsibilities of the position; and (iii) performance of the executive officer's institution, the specific executive officer, or one of the institution's significant components with respect to achievement of goals, consistency with supervisory guidance and internal rules of the entity, and compliance with applicable laws and regulations. We have incorporated these factors into our development, implementation, and review of compensation policies and practices for executive officers, as described below.

Pursuant to the Executive Compensation Rule, the Finance Agency requires the FHLBanks to provide information to the Finance Agency for review and non-objection concerning all compensation actions relating to the respective FHLBanks' NEOs. This information, including studies of comparable compensation, must be provided to the Finance Agency at least 30 days in advance of any planned FHLBank payment of compensation to NEOs. In addition, the FHLBanks are required to provide at least 60 days' advance notice to the Finance Agency of any arrangement that provides for incentive awards to NEOs. Under the supervision of our board of directors, we provide this information to the Finance Agency as required.

Finance Agency Advisory Bulletin 2009-AB-02. Finance Agency Advisory Bulletin 2009-AB-02 sets forth certain principles for executive compensation practices to which each FHLBank and the Office of Finance should adhere in setting executive compensation. These principles consist of the following:

- executive compensation must be reasonable and comparable to that offered to executives in similar positions at other comparable financial institutions;
- executive incentive compensation should be consistent with sound risk management and preservation of the par value of the FHLBank's capital stock;
- a significant percentage of an executive's incentive-based compensation should be tied to longer-term performance and outcome indicators;
- a significant percentage of an executive's incentive-based compensation should be deferred and made contingent upon performance over several years; and
- the FHLBank's board of directors should promote accountability and transparency in the process of setting compensation.

In evaluating an FHLBank's compensation, the Finance Agency Director will consider the extent to which an executive's compensation is consistent with these advisory bulletin principles. We have incorporated these principles into our development, implementation, and review of compensation policies and practices for executive officers, as described below.

Finance Agency Rule on Golden Parachute Payments. The Finance Agency's rule on golden parachute payments ("Golden Parachute Rule") sets forth the standards that the Finance Agency will take into consideration when limiting or prohibiting golden parachute payments by an FHLBank, the Office of Finance, Fannie Mae or Freddie Mac. The Golden Parachute Rule generally prohibits golden parachute payments except in limited circumstances with Finance Agency approval. Golden parachute payments may include compensation paid to a director, officer or employee following the termination of such person's employment by a regulated entity that is insolvent, is in conservatorship or receivership, is required by the Finance Agency Director to improve its financial condition, or has been assigned a composite examination rating of 4 or 5 by the Finance Agency. Golden parachute payments generally do not include payments made pursuant to a qualified pension or retirement plan, an employee welfare benefit plan, a bona fide deferred compensation plan, a nondiscriminatory severance pay plan, or payments made by reason of the death or disability of the individual. The golden parachute provisions in our benefit plans comply with the Golden Parachute Rule.

Compensation Philosophy and Objectives. In 2021, 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 compensation and benefits package that will enable us 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. We desire to be competitive and forward-thinking while maintaining a prudent risk management 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, Mr. McGrath, and Mr. Short) or additional non-elective contributions (with respect to Mr. Streitenberger) 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 President - CEO's performance and researches and recommends the President - CEO's salary to the board of directors. The President - 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 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 21, 2022, and January 22, 2021 respectively. Those charters are available on our website by scrolling to the bottom of any web page on www.fhlbi.com and then selecting "Corporate Governance" in the navigation menu.

Role of Compensation Consultants in Setting Executive Compensation. For each of the last 11 years, McLagan Partners, Inc. ("McLagan"), an Aon plc company, was engaged by Bank management to work with the HR Committee to evaluate and update our salary and benefit benchmarks for certain positions, including the NEOs' positions.

The salary and benefit benchmarks we use to establish reasonable and competitive compensation for our employees are 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 10 percent of the market benchmark to be competitive and within 15 percent 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.

For 2021, McLagan identified three peer groups, which are collectively referred to as "Competitor Groups." The first peer group is comprised of the 10 other FHLBanks. The benchmark 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 a number of large financial institutions and regional commercial banks, as well as the Federal Reserve Banks. There are 99 institutions in the second peer group. The benchmark positions used from the large financial institutions and regional commercial banks include the divisional/functional heads, rather than the overall head of the bank, to account for the difference in scale of activities at such institutions compared to an FHLBank (*e.g.*, Head of Corporate Banking used in the benchmark, rather than a large financial institution's or regional bank's CEO, as the appropriate comparison to the FHLBank's CEO). While the benchmark jobs from the large financial institutions and regional/commercial banks capture the functional responsibility of FHLBank positions, they do not capture the executive responsibility that exists at the FHLBank.

ABN AMRO	Federal Reserve Bank of Atlanta	New York Community Bank
AIB	Federal Reserve Bank of Boston	Nomura Securities
Ally Financial Inc.	Federal Reserve Bank of Chicago	Nord/LB
Ameris Bank	Federal Reserve Bank of Kansas City	Northern Trust Corporation
Arvest Bank	Federal Reserve Bank of Minneapolis	OCBC Bank
Associated Bank	Federal Reserve Bank of New York	OneMain Financial
Australia & New Zealand Banking Group	Federal Reserve Bank of Richmond	People's United Financial, Inc.
Bank ABC	Federal Reserve Bank of San Francisco	PNC Bank
Bank of America	Federal Reserve Bank of St. Louis	Rabobank
Bank of New York Mellon	Fifth Third Bank	Regions Financial Corporation
Bank of Nova Scotia	First Citizens Bank - NC	Royal Bank of Canada
Bank of the West	First National Bank of Omaha	Sallie Mae
BBVA Compass	First Republic Bank	Santander Bank, NA
BMO Financial Group	First Tennessee Bank/First Horizon	Siemens Financial Services
BNP Paribas	Freddie Mac	Signature Bank - NY
BOK Financial Corporation	Frost Bank	Societe Generale
Brown Brothers Harriman	Hancock Whitney Bank	Standard Chartered Bank
Capital One	HSBC	State Street Corporation
Charles Schwab & Co.	Huntington Bancshares, Inc.	Sterling National Bank
CIBC World Markets	ING	Sumitomo
CIT Group Inc.	Intesa Sanpaolo	SVB Financial Group
Citigroup	Investec Bank	Synovus Financial Corporation
Citizens Financial Group	Investors Bancorp, Inc	TD Securities
City National Bank	JP Morgan Chase	Texas Capital Bank
Comerica	KBC Bank	Truist
Commerce Bank	KeyCorp	U.S. Bancorp
Commerzbank	Lloyds Banking Group	UMB Financial Corporation
Commonwealth Bank of Australia	M&T Bank Corporation	UniCredit Bank AG
Crédit Agricole CIB	Macquarie Bank	United Overseas Bank Group
Credit Industriel et Commercial – N.Y.	MUFG Bank, Ltd.	Valley National Bancorp
DNB Bank	National Australia Bank	Webster Bank
East West Bancorp, Inc.	Natixis Corporate & Investment Banking	Wells Fargo Bank
Fannie Mae	NatWest	Zions Bancorporation

The third peer group consists of publicly-traded regional/commercial banks with assets of $10 billion to $20 billion. There are 38 banks in the third peer group. The benchmark jobs used from this peer group include the NEOs reported in their proxy statements, which capture the executive responsibilities encompassed in the positions.

Atlantic Union Bankshares Corporation	First Financial Bankshares, Inc.	Pacific Premier Bancorp, Inc.
Banner Corporation	First Interstate BancSystem, Inc.	Provident Financial Services, Inc.
Berkshire Hills Bancorp, Inc.	First Merchants Corporation	Renasant Corporation
Cadence Bancorporation	Glacier Bancorp, Inc.	Sandy Spring Bancorp, Inc.
Cathay General Bancorp	Heartland Financial USA, Inc.	ServisFirst Bancshares, Inc.
Columbia Banking System, Inc.	Home Bancshares, Inc.	TFS Financial Corporation
Community Bank System, Inc.	Hope Bancorp, Inc.	TowneBank
Customers Bancorp, Inc.	Independent Bank Corp.	Trustmark Corporation
CVB Financial Corp.	Independent Bank Group, Inc.	United Community Banks, Inc.
Eagle Bancorp, Inc.	International Bancshares Corporation	Washington Federal, Inc.
Eastern Bankshares, Inc.	NBT Bancorp Inc.	WesBanco, Inc.
First Busey Corporation	Northwest Bancshares, Inc.	WSFS Financial Corporation
First Financial Bancorp.	OceanFirst Financial Corp.	

The benchmark jobs 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 Competitor Group 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 President - 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 ("ERM") 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 our Bank. Further, based on such reviews, the HR Committee and the Executive/Governance Committee believe that our plans and programs contain features that operate to mitigate risk and 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 2021 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 ("IRC") Section 409A. If an executive is entitled to nonqualified deferred compensation benefits that are subject to IRC Section 409A, and such benefits do not comply with IRC 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 President-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 President - 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 President - 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 President - 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 President - 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 President - 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 President - 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 President - 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 2021 were effective January 3, 2021 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 board of directors adopted an incentive compensation plan effective January 1, 2012 ("Incentive Plan"), which 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 President - 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 2019, 2020 or 2021. 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 (i.e., amount actually received during the year as salary) or wages for hours worked, including overtime, and hours paid under our paid-time-off policies, as applicable, but excluding any bonus, incentive compensation, deferred compensation payments, lump sum payouts for accrued but unused vacation time, or long-term disability insurance payments paid for the current or a prior year.

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, 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.

2021 Annual Award (Paid in 2022). The table below presents the incentive opportunity, earned, and deferred percentages of base salary for Level I Participants for the 2021 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%

On December 16, 2020, the board of directors established Annual Award Performance Goals for 2021 for Level I Participants relating to specific mission goals for financial performance and operational efficiency; member activity; ERM; Diversity, Equity & Inclusion; and operational excellence. The weights and specific achievement levels for each 2021 mission goal are presented below.

2021 Mission Goals	Weighted Value		Performance Levels			Actual Result	Achievement Percentage	Weighted Average Achievement	
	Bank [1]	ERM	Threshold	Target	Maximum			Bank [1]	ERM
Profitability [3]	25 %	15 %	189 bps	292 bps	414 bps	293 bps	75%	18.8 %	11.3 %
Operating Expenses vs. Budget [3]	10 %	10 %	<=100%	<=97.5%	<=95%	Maximum	100%	10.0 %	10.0 %
Member Participation [4]	10 %	5 %	58.0%	60.0%	62.5%	61.8%	93%	9.3 %	4.6 %
Member Education and Outreach [5]	10 %	5 %	50% of All Members	Threshold and 75% of Tier 1 Members	Target and 50% of Tier 2 Members	Maximum	100%	10.0 %	5.0 %
Fee Income Increase [6]	5 %	5 %	5%	10%	20%	Maximum	100%	5.0 %	5.0 %
CIP Advances Originated [7]	10 %	5 %	$37.5 MM	$75 MM	$150 MM	Maximum	100%	10.0 %	5.0 %
Complete Enterprise Risk Management Objectives [8]	10 %	35 %	2	3	4	Maximum	100%	10.0 %	35.0 %
Host education/ information sessions to prepare diverse businesses for opportunities to do business with member institutions	5 %	5 %	1	2	3	Maximum	100%	5.0 %	5.0 %
Develop and promote each Employee Resource Group through hosting cultural awareness events/ activities [9]	5 %	5 %	30%	40%	50%	Maximum	100%	5.0 %	5.0 %
Member facing technology (One Bank Portal & Access) [10]	5 %	5 %	Technical Readiness	Threshold and Operational Readiness	Target and Production Implementation	Maximum	100%	5.0 %	5.0 %
Workday Phase 2 [11]	5 %	5 %	Technical Readiness	Threshold and Operational Readiness	Target and Transition System of Record	Maximum	100%	5.0 %	5.0 %
Total	100%	100%						93.1%	95.9%

(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, 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 JCE Agreement dated August 5, 2011, as amended, by and among the Federal Home Loan Banks 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 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 FHFA's regulation, policy, directive, guidance, or law.

[3] Operating Expenses vs. Budget is a measure of to what degree our core operating expenses are equal to or less than the operating expense budget approved by our board. Core operating expenses are operating expenses excluding incentive compensation, excise tax, and voluntary contributions to the Bank's DB Plan. Core operating expenses are measured as a percentage of the core operating expense budget for 2021.

[4] Member participation is the percentage of members that utilize any one of the following products during the year: advances, letters of credit, lines of credit or MPP. 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, 2021. Membership will be calculated as the simple average of the membership at the end of each month in 2021. Goal assumes no material change in membership eligibility under FHFA's regulation, policy, directive, guidance or law.

[5] Member education and outreach events for purposes of threshold achievement include symposia, conferences, workshops, webinars, educational events, presentations at trade conferences, presentation to member Boards of Directors or Committees thereof or to management committees, in-person joint presentations to members (where a subject matter expert or senior officer of the Bank participates) and other events educating Bank members about Advances, MPP, the Bank's community investment products and activities, industry trends, and other products and services. For purposes of Target and Maximum achievement, member education and outreach events include presentations to member Boards of Directors or committees thereof, presentations to member management committees or in-person joint presentations to members (where a subject matter expert or senior officer of the Bank participates) to discuss or educate regarding Advances, MPP, the Bank's community investment products, industry trends or other products and services. Member tiers are defined by management based upon core business levels or the capacity to engage in core business with the Bank and are established annually. Status and reporting on this Goal and its attainment will be supported by the Bank's Customer Relationship Management (CRM) system. Achievement towards this goal will be calculated by dividing the number of members that participated in one of the above events (defined as a member at the time of participation in the event) during the calendar year by the simple average of the total number of members of the Bank (Threshold), total Tier 1 members (Target), or Tier 2 members (Maximum) as of the end of each month of 2021.

[6] Fee income consists of fees earned on Bank products and services, including letters of credit, lines of credit, safekeeping services, and other products and services as may be approved by the board from time to time. The goal is defined as the percentage increase in the total fee income relative to total fee income earned in 2020.

[7] "CIP" means Community Investment Program. "CIP Advances" are newly originated Community Investment Cash Advances, including CIP and other qualifying Advances and CIP qualified letters of credit, provided in support of targeted projects as defined in 12 C.F.R. Part 1291 and the Federal Home Loan Bank Act.

[8] Status and reporting of this goal, and its attainment, will be provided in writing to the Risk Committee. The Enterprise Risk Management Excellence objectives are:

Objective #1: Enhancements to the board approved Risk Appetite Statement ("RAS"). ERM is to prepare a comprehensive proposal to enhance the RAS, including recommendations of changes to methodology, risk categories and supporting key metrics. The proposal shall reflect feedback received from the Bank's first line management while adhering to applicable regulatory guidance. In conjunction with the proposal, ERM shall develop a new or modify the existing process governing RAS metrics including, but not limited to, metric tracking and associated procedures. ERM's proposal will be presented for approval by the Risk Committee and Risk Oversight Committee by June 30, 2021.

Objective #2: Implement enhancements to the AMA/MPP prepayment estimation process. ERM is to review the prepayment estimation process for AMA/MPP and propose enhancements to improve performance metrics related to prepayment modeling. The proposed enhancements shall reflect feedback from the model users (first and second line management), model risk management, subject matter experts and the model vendor, while adhering to applicable regulatory guidance. ERM's proposal will be presented to the Risk Committee by September 30, 2021 and implemented by December 31, 2021. It is also understood that implementation of enhancements would require review by the ERM Model Risk Management Group, approval from the Risk Committee, and non-objection from the FHFA.

Objective #3: Enhancements of the counterparty credit risk methodology. ERM is to review and revise the methodology used to monitor and evaluate unsecured credit counterparties, including the determination of the level used to determine a counterparty's regulatory capacity. The proposal shall reflect feedback from the Bank's first line management while adhering to applicable regulatory guidance. ERM's proposal will be presented for approval by the Risk Committee and Risk Oversight Committee by August 31, 2021.

Objective #4: Enhancements to the scripting governance program. ERM, in collaboration with IT, will develop an enterprise-wide policy governing scripting use cases, guidelines and methodologies. The policy will establish baseline requirements for utilizing scripting languages across the organization as well as a method for inventorying. Determination for additional technical resources, formal training or establishment of working groups will be made and recommendations for such will be presented for approval by the appropriate committee(s). The policy and related elements will be presented for approval by the Risk Committee and Risk Oversight Committee by August 31, 2021.

The criteria and milestones to successfully complete each objective will be reviewed and approved by the Risk Committee.

(9) This goal applies to any Employee Resource Groups ("ERGs") in place as of January 1, 2021 and the number of members as of that date; however, non-members can also be counted in attendance. The percentages are based on the average number of employees attending a total of 4 events hosted by each ERG. (Example: If the Women's ERG has 50 members, to reach the 50% maximum goal, there must be an average of 25 attendees at their 4 events, or 100 total attendees for the 4 events). Each ERG is measured separately and both must meet the percentage goal separately.

(10) The criteria and milestones for achievement, as well as the status and reporting of this goal and its attainment, will be reviewed and approved by the Information Technology Steering Committee. Threshold, Target, and Maximum performance achievement levels are defined as follows:

Technical Readiness: "Technical Readiness" is the development and testing of the One Bank Portal.

Operational Readiness: "Operational Readiness" is the governance, training, and operational activities required to support the operation of the One Bank Portal.

Production Implementation: "Production Implementation" is implementation of the One Bank Portal into production.

(11) The criteria and milestones for achievement, as well as status and reporting of this goal and its attainment, will be reviewed and approved by the Information Technology Steering Committee. Threshold, Target, and Maximum performance achievement levels are as follows:

Technical Readiness: "Technical readiness" is the configuration and testing of the core financial modules of Workday.

Operational Readiness: "Operational Readiness" is the governance, training, and operational activities required to support the operation of the core financial modules of Workday.

Transition System of Record: "Transition System(s) of Record" is transitioning the system of record to the core financial modules of Workday.

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**
Cindy L. Konich	$ 959,946	50%	100%	$ 479,973	94.5%	$ 453,478
Gregory L. Teare	470,132	40%	100%	188,053	93.1%	175,077
Brendan W. McGrath	413,472	40%	100%	165,389	95.9%	158,658
Deron J. Streitenberger	436,857	40%	100%	174,743	93.1%	162,686
K. Lowell Short, Jr.	348,738	35%	100%	122,058	93.1%	113,636

(1) Rounded to the nearest tenth of a percent.

2018 Deferred Award (Paid in 2022). Fifty percent of each Level I Participant's 2018 Award ("2018 Deferred Award") was deferred for a three-year period that ended December 31, 2021 ("2019-2021 Deferral Performance Period"). The 2018 Deferred Award became earned and vested on that date, subject to the achievement of specific Bank performance goals over the 2019-2021 Deferral Performance Period and other conditions described below. The performance goals for the 2019-2021 Deferral Performance Period Award are substantially similar to those established for the 2018-2020 Deferral Performance Period. The following table presents the performance goals for the 2018 Deferred Award relating to our profitability, retained earnings and prudential management standards, together with actual results and specific achievement levels for each mission goal.

2019-2021 Mission Goals	Weighted Value	Performance Levels			Actual Result	Achievement %	Weighted Average Achievement
		Threshold [1]	Target [1]	Maximum [1]			
Profitability [2]	35%	25 bps	50 bps	150 bps	maximum	125%	44%
Retained Earnings [3]	35%	3.5%	3.9%	4.3%	maximum	125%	44%
Prudential Standards (see below)	30%	Achieve 1 Prudential Standard	(a)	Achieve both Prudential Standards	maximum	125%	37%
Prudential Standard 1: Maintain a regulatory capital-to-assets ratio of at least 4.16% as measured on each quarter-end in 2019 through 2021.							
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) For purposes of this goal for 2019 and 2020, profitability is defined as the Bank's profitability rate in excess of the Bank's cost of funds rate. Profitability is the Bank's adjusted net income reduced by the portion of net income to be added to restricted retained earnings under the JCE Agreement and increased by the Bank's accruals for incentive compensation. Adjusted net income represents GAAP net income adjusted: (i) for the net impact of certain current and prior period advance prepayments and debt extinguishments, net of the AHP assessment, (ii) to exclude mark-to-market adjustments on derivatives and certain other effects from derivatives and hedging activities, net of the AHP assessment, and (iii) to exclude the effects from interest expense on MRCS. The Bank's profitability rate, as defined above, as a percentage of average total regulatory capital stock (B1 weighted at 100% and B2 weighted at 80% to reflect the relative weights of the Bank's dividend). This goal assumes no material change in investment authority under the Finance Agency's regulation, policy, directive, guidance, or law.

For purposes of this goal for 2021, 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 JCE Agreement 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 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 FHFA's regulation, policy, directive, guidance, or law.
Attainment of this goal will be computed using the simple average of annual profitability measures over the three-year period.

(3) Total retained earnings divided by mortgage assets, measured at the end of each month. Calculated each month as total retained earnings divided by the sum of the carrying value of the MBS and AMA assets 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 2019-2021 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 2018 Deferred Award.

The following table presents the payouts of the 2018 Deferred Awards to the NEOs by applying the total achievement level of the performance goals for the 2018 Deferred Award. These payouts are also presented in the Non-Equity Incentive Plan Compensation table. Mr. McGrath was not eligible for a 2018 Deferred Award.

2018 Deferred Award - 2019-2021 Performance Period

NEO	Total Award for 2018	Percentage Deferred	Deferred Amount	Total Achievement	Deferred Award Paid in 2022
Cindy L. Konich	$ 884,242	50%	$ 442,121	125%	$ 552,651
Gregory L. Teare	342,850	50%	171,425	125%	214,281
Deron J. Streitenberger	237,282	50%	118,641	125%	148,301
K. Lowell Short, Jr.	226,812	50%	113,406	125%	141,758

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 $290,000 in 2021. In addition, benefits payable to participants in the DB Plan may not exceed a maximum benefit limit established by the IRS, which in 2021 was $230,000, 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 IRC 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 had a one-time unfavorable impact on employees' pension values in 2021.

The following sections describe the differences in the benefits provided under these plans.

Grandfathered DB Plan. The following table shows estimated annual benefits payable upon retirement at age 65 by combining the Grandfathered DB Plan and the SERP. 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 plans, and hired prior to July 1, 2008, which includes Ms. Konich and Mr. McGrath.

Sample High 3-Consecutive-Year Average Compensation	Annual Benefits Payable at age 65 Based on Years of Benefit Service			
	25	30	35	40
$500,000	$ 312,500	$ 375,000	$ 437,500	$ 500,000
600,000	375,000	450,000	525,000	600,000
700,000	437,500	525,000	612,500	700,000
800,000	500,000	600,000	700,000	800,000
900,000	562,500	675,000	787,500	900,000
1,000,000	625,000	750,000	875,000	1,000,000
1,100,000	687,500	825,000	962,500	1,100,000
1,200,000	750,000	900,000	1,050,000	1,200,000
1,300,000	812,500	975,000	1,137,500	1,300,000
1,400,000	875,000	1,050,000	1,225,000	1,400,000
1,500,000	937,500	1,125,000	1,312,500	1,500,000

- 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, which is not reflected in the table.

Amended DB Plan. The following table shows estimated annual benefits payable upon retirement at age 65 by combining the Amended DB Plan and the 2005 SERP. 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 plans, hired on or after July 1, 2008 but before February 1, 2010, which includes Mr. Teare and Mr. Short.

Sample High 5-Consecutive-Year Average Compensation	Annual Benefits Payable at age 65 Based on Years of Benefit Service	
	15	20
$500,000	$ 112,500	$ 150,000
600,000	135,000	180,000
700,000	157,500	210,000

- 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.

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 participated in the Pentegra Defined Contribution Retirement Savings Plan for Financial Institutions, as amended, a multiple employer retirement savings plan qualified under IRC Section 401(k), through October 1, 2020. Effective October 2, 2020, the Bank adopted the Federal Home Loan Bank of Indianapolis Retirement Savings Plan, which is a single employer retirement savings plan qualified under IRC Section 401(k). The terms of such plans are substantially the same and are collectively referred to as the "DC Plan."

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 2021 an employee could contribute up to $19,500 of eligible compensation on a pre-tax basis, and an employee age 50 or over could contribute up to an additional $6,500 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 $58,000 per year ($64,500 per year including catch-up contributions for employees age 50 or over) could have been contributed to a participant's account in 2021, including our matching contribution and the participant's pre-tax and after-tax contributions. In addition, no more than $290,000 of annual compensation could have been taken into account in computing eligible compensation in 2021. 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 receives the NEC and is 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 IRC 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 IRC. 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 will be 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.

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, 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, 2021, 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	$ 25,930	52	$ 959,946	$ 985,876
Gregory L. Teare	12	18,231	52	470,132	488,363
Brendan W. McGrath	12	25,930	52	413,472	439,402
Deron J. Streitenberger	9	19,447	36	302,440	321,887
K. Lowell Short, Jr.	12	18,231	52	348,738	366,969

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 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 IRC 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 $3.4 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, 2021, 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	$ 5,194,696
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	422,236
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	2,131,746
Medical and dental insurance coverage for 36 months	77,789
Reimbursement of reasonable accounting, legal, financial advisory, and actuarial services [1]	15,000
Total value of KESA	$ 7,841,467

(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. On November 20, 2020, the board of directors re-adopted 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) include all NEOs other than Ms. Konich. Mr. Teare, Mr. McGrath, and Mr. Streitenberger are Level 1 Participants. Mr. Short 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 IRC.

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, 2021:

NEO	Amount
Gregory L. Teare	$ 1,622,901
Brendan W. McGrath	910,262
Deron J. Streitenberger	1,387,786
K. Lowell Short, Jr.	893,994

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] President - CEO (PEO)	2021	$959,946	$ 1,006,129	$ —	$ 59,480	$ 2,025,555
	2020	996,867	941,870	4,616,000	61,878	6,616,615
	2019	931,996	839,154	5,665,000	69,610	7,505,760
Gregory L. Teare EVP - CFO (PFO)	2021	470,132	389,358	115,000	29,334	1,003,824
	2020	488,214	368,486	301,000	30,509	1,188,209
	2019	456,430	303,036	368,000	28,353	1,155,819
Brendan W. McGrath [6] EVP - CRO	2021	413,472	158,658	356,000	25,857	953,987
Deron J. Streitenberger EVP - CBOO	2021	436,857	310,987	—	44,637	792,481
	2020	423,981	287,388	—	43,609	754,978
	2019	378,040	253,559	—	28,959	660,558
K. Lowell Short, Jr. SVP - CAO	2021	348,738	255,394	117,000	21,879	743,011
	2020	362,151	242,792	223,000	22,877	850,820
	2019	338,572	222,766	223,000	21,256	805,594

(1) Salary reflects 26 biweekly pay periods for 2021 and 2019 and 27 biweekly pay periods for 2020.

(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. The change in pension value is determined by calculating the present value of pension benefits accrued through the beginning and ending plan valuation dates, based on the provisions of the 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. No portion of this change in pension value is realizable until a qualifying event occurs, such as retirement, and therefore, no portion of this change in pension value has been paid or made available to any of the NEOs. No NEO received preferential or above-market earnings on deferred compensation.

(4) Includes contributions to the DC Plan, NEC program, and the SETP, as applicable, for Ms. Konich ($57,597), Mr. Teare ($28,208), Mr. McGrath ($24,808), Mr. Streitenberger ($43,551), and Mr. Short ($20,924). Also includes life insurance policy premiums and income tax gross-ups provided to all employees related to gift cards 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) 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. McGrath was not an NEO for 2020 or 2019.

Non-Equity Incentive Plan Compensation

Name	Year	Annual Award		Deferred Award		Total Non-Equity Incentive Plan Compensation
		Amounts Earned	Date Paid	Amounts Earned [1]	Date Paid	
Cindy L. Konich	2021	$ 453,478	3/4/2022	$ 552,651	3/4/2022	$ 1,006,129
	2020	455,817	3/5/2021	486,053	3/5/2021	941,870
	2019	372,798	3/6/2020	466,356	3/6/2020	839,154
Gregory L. Teare	2021	175,077	3/4/2022	214,281	3/4/2022	389,358
	2020	176,265	3/5/2021	192,221	3/5/2021	368,486
	2019	146,058	3/6/2020	156,978	3/6/2020	303,036
Brendan W. McGrath [2]	2021	158,658	3/4/2022	—	N/A	158,658
Deron J. Streitenberger [3]	2021	162,686	3/4/2022	148,301	3/4/2022	310,987
	2020	153,074	3/5/2021	134,314	3/5/2021	287,388
	2019	120,973	3/6/2020	132,586	3/6/2020	253,559
K. Lowell Short, Jr. [4]	2021	113,636	3/4/2022	141,758	3/4/2022	255,394
	2020	114,407	N/A	128,385	3/5/2021	242,792
	2019	94,800	N/A	127,966	3/6/2020	222,766

(1) Amounts earned in 2021, 2020, and 2019 represent the 2018, 2017, and 2016 Deferred Awards, respectively.

(2) Mr. McGrath elected to defer 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.

(3) Mr. Streitenberger elected to defer 10% of his 2017 Deferred Award payable in 2021, pursuant to the terms of the SETP.

(4) Mr. Short elected to defer 100% of his 2020 and 2019 Annual Awards, and 80% of his 2017 Deferred Award payable in 2021, pursuant to the terms of the SETP.

Grants of Plan-Based Awards Table for 2021

Name	Estimated Future Payouts Under Non-Equity Incentive Plans				
	Plan Name	Grant Date	Threshold [1] [2]	Target	Maximum
Cindy L. Konich	Incentive Plan - Annual	12/16/20	$ 11,999	$ 383,978	$ 479,973
	Incentive Plan - Deferred	12/16/20	340,109	453,478	566,848
Gregory L. Teare	Incentive Plan - Annual	12/16/20	4,701	141,040	188,053
	Incentive Plan - Deferred	12/16/20	131,308	175,077	218,846
Brendan W. McGrath	Incentive Plan - Annual	12/16/20	4,135	124,042	165,389
	Incentive Plan - Deferred	12/16/20	118,993	158,658	198,322
Deron J. Streitenberger	Incentive Plan - Annual	12/16/20	4,369	131,057	174,743
	Incentive Plan - Deferred	12/16/20	122,014	162,686	203,357
K. Lowell Short, Jr.	Incentive Plan - Annual	12/16/20	3,051	91,544	122,058
	Incentive Plan - Deferred	12/16/20	85,227	113,636	142,045

(1) The Incentive Plan - Annual threshold payout is the amount expected to be paid when meeting the threshold for the smallest weighted of the eleven components of the 2021 Annual Award Performance Period Goals. If the threshold for the smallest weighted of the eleven components was achieved, but the threshold for all of the other components was not reached, the payout would be 2.50% of the maximum Annual Award for each of the NEOs (1.25% x base salary for Ms. Konich, 1.00% x base salary for Mr. Teare, 1.00% x base salary for Mr. McGrath, 1.00% x base salary for Mr. Streitenberger, and 0.88% x base salary for Mr. Short). There was no guaranteed payout under the 2021 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 (2022-2024). 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 - 2021 table previously presented shows the amounts actually earned and paid under the 2021 Annual Award provisions of the Incentive Plan.

Pension Benefits Table

Name [1]	Plan Name	Number of Years of Credited Service [2]	Present Value of Accumulated Benefits [3]	Payments During Last Fiscal Year
Cindy L. Konich [4]	DB Plan	37	$ 3,426,000	$ —
	SERP	37	23,158,000	—
Gregory L. Teare [5]	DB Plan	19	967,000	—
	SERP	13	949,000	—
Brendan W. McGrath [6]	DB Plan	21	1,834,000	—
	SERP	21	968,000	—
K. Lowell Short, Jr. [7]	DB Plan	11	745,000	—
	SERP	11	427,000	—

(1) Mr. Streitenberger is 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) Pension values are determined by calculating the present values of pension benefits accrued through the plan valuation dates. The calculations incorporate the provisions of the applicable 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 2.83% and the PRI-2012 white collar worker annuitant tables (with Scale MP-2021) for qualified annuities or the IRS applicable mortality table for 2021 for qualified lump sums. SERP benefits are based on age 65 lumps sums valued with IRS May 2021 Lump Sum Segment Rates (0.61%, 2.84%, 3.54%), discounted to current age at 2.29% 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.

(4) Ms. Konich is eligible to retire under the DB Plan and SERP due to the combination of her age and years of credited service.

(5) 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.

(6) Mr. McGrath is not eligible to retire under the DB Plan and SERP.

(7) Mr. Short is eligible to retire under the DB Plan and SERP due to the combination of his age and years of credited service.

Non-Qualified Deferred Compensation - 2021

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	$ 57,597	$ 40,497	$ 189,676	$ —	$ 943,331
Gregory L. Teare	70,520	11,108	23,029	—	407,886
Brendan W. McGrath	99,272	7,708	41,132	—	318,368
Deron J. Streitenberger	26,537	14,851	5,908	—	67,043
K. Lowell Short, Jr.	239,000	3,824	69,923	—	1,111,730

(1) The contributions by Ms. Konich and Mr. Teare are included in the "Salary" reported in the Summary Compensation Table for 2021. Of the contributions by Mr. McGrath, $82,694 are included in the "Salary" reported in the Summary Compensation Table for 2021. The remaining $16,578 of contributions by Mr. McGrath reflect the amounts deferred related to the 2020 Annual Award. Of the contributions by Mr. Streitenberger, $13,106 are included in the "Salary" reported in the Summary Compensation Table for 2021. The remaining $13,431 of contributions by Mr. Streitenberger reflect the amounts deferred related to the 2017 Deferred Award reported as "Non-Equity Incentive Plan

Compensation" in the Summary Compensation Table for 2020. Of the contributions by Mr. Short, $24,412 are included in the "Salary" reported in the Summary Compensation Table for 2021. The remaining $214,588 of contributions by Mr. Short reflect the amounts deferred related to the 2020 Annual Award ($111,881) and the 2017 Deferred Award ($102,708) reported as "Non-Equity Incentive Plan Compensation" in the Summary Compensation Table for 2020. Contributions are net of 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 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 2021 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 2021.

Principal Executive Officer Pay Ratio Disclosure

Our President - CEO is our PEO. As described below, for the year ended December 31, 2021, 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, amounts attributable to changes in pension value under 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 has been paid or made available to the PEO or median employee; in fact, no portion is realizable until a qualifying event occurs, such as retirement.

For 2021, the Total Compensation of the PEO was $2,025,555. As of December 31, 2021, our PEO had 37 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, which is reported as $0, and, as a result, constituted 0% of her reported 2021 Total Compensation.

As required by SEC rules, we reevaluated our employees to identify a new median employee for our pay ratio disclosures in 2020. We identified the median employee by first determining the total of salary, wages, bonuses (if any) and incentive awards (collectively, "cash compensation") for each of the full-time and part-time employees of our Bank on the last pay date of 2020 and annualizing the cash compensation of those who were not employed by the Bank for all of 2020. We then ranked the 2020 annual cash compensation for all such employees from lowest to highest, excluding the PEO.

There was one employee at the median based on cash compensation, but that employee does not participate in a pension plan. We therefore selected as the median employee the individual who participates in the same plan as our PEO (the Grandfathered DB Plan), and whose 2020 annual cash compensation was closest to that of the actual median employee. We made no other material assumptions or adjustments in identifying the median employee. This approach ensures that the median employee's Total Compensation, like the PEO's Total Compensation, includes a change in pension value and thereby provides an appropriate comparison. We then calculated the median employee's Total Compensation in the same manner that we calculated Total Compensation for the PEO.

For 2021, the Total Compensation of the median employee was $165,141. As of December 31, 2021, our median employee had 14 years of credited service in the DB Plan. The median employee's Total Compensation includes a change in the present value of pension benefits of $20,000. As a result, the ratio of the PEO’s Total Compensation to that of the median employee was 12:1. Excluding the 2021 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.

2021 Compensation. In September 2020, 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 2021 ("2021 Policy"). Under the 2021 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 2021 Policy provides that director fees were to be paid at the end of each quarter.

The 2021 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 2021.

The following table summarizes the annual fee limits of the 2021 Policy as approved by the board of directors.

Position	Annual Fee Limit
Chair	$ 137,000
Vice Chair	123,000
Audit Committee Chair	122,000
Affordable Housing Committee Chair	117,000
Finance/Budget Committee Chair	117,000
Human Resources Committee Chair	117,000
Risk Oversight Committee Chair	117,000
Technology Committee Chair	117,000
All other directors	107,000
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 2021

Name	Fees Earned or Paid-in Cash	Total
Brian D. J. Boike	$ 107,000	107,000
Ronald Brown	107,000	107,000
Clifford M. Clarke	107,000	107,000
Lisa D. Cook	107,000	107,000
Charlotte C. Decker	117,000	117,000
Robert M. Fisher	117,000	117,000
Karen F. Gregerson	123,000	123,000
Michael J. Hannigan, Jr.	107,000	107,000
Jeffrey G. Jackson	107,000	107,000
James L. Logue III	107,000	107,000
Robert D. Long	122,000	122,000
Michael J. Manica	117,000	117,000
Dan L. Moore	137,000	137,000
Larry W. Myers	117,000	117,000
Christine Coady Narayanan	117,000	117,000
Todd E. Sears	107,000	107,000
Larry A. Swank	117,000	117,000

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 IRC, 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 28, 2022, 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	% Outstanding Shares
Flagstar Bank, FSB - 5151 Corporate Drive, Troy MI	3,286,357	15.4 %
The Lincoln National Life Insurance Company - 1301 S Harrison Street, Fort Wayne, IN	1,854,473	8.7 %
Jackson National Life Insurance Company - 1 Corporate Way, Lansing MI	1,193,452	5.6 %
Total	6,334,282	29.7 %

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 28, 2022.

Director Name	Name of Member	Number of Shares Owned by Member	% of Outstanding Shares
Brian D. J. Boike	Flagstar Bank, FSB	3,286,357	15.40 %
Clifford M. Clarke	Three Rivers Federal Credit Union	76,653	0.36 %
Robert M. Fisher	Lake-Osceola State Bank	13,252	0.06 %
Karen F. Gregerson	The Farmers Bank	15,532	0.07 %
Jeffrey G. Jackson	Michigan State University Federal Credit Union	136,879	0.64 %
Michael J. Manica	United Bank of Michigan	49,299	0.23 %
Dan L. Moore	Home Bank SB	21,775	0.10 %
Larry W. Myers	First Savings Bank	171,433	0.80 %
Sherri L. Reagin	The North Salem State Bank	5,063	0.02 %
Total		3,776,243	17.68 %

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. 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, we have 17 directors: pursuant to the Bank Act, nine were elected or re-elected as member directors by our member institutions and eight were elected or re-elected as "independent directors" 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 the nine member directors, however, is a senior officer or director of an institution that is our member and is encouraged to 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").

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. None of those companies, however, has, or within the past three most recently completed fiscal years had, a relationship with us that resulted in payments to, or receipts from, the Bank in excess of the limits set forth in the NYSE independence standards. Moreover, 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, our eight directors (Directors Bosway, Cook, Decker, Hines, Long, Narayanan, Sears and Swank) who are "independent" directors, as defined in and for purposes of the Bank Act, are also independent under the NYSE standards.

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 routinely engages in transactions with us (which may include advances, MPP and AHP transactions), and that such transactions occur frequently and are encouraged 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.

The board of directors has a standing Audit Committee and a standing HR Committee. For the reasons noted above, the board of directors determined that none of the current member directors on these committees (including Directors Boike, Clarke, Fisher, Gregerson, Reagin, Jackson, Myers and Moore (ex-officio)) are "independent" under the NYSE standards. The board determined that all of the independent directors on these committees (including Directors Bosway, Decker, Hines, Long and Sears) are independent under NYSE standards.

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, 2021 and 2020 by our independent registered public accounting firm, PricewaterhouseCoopers LLP ($ amounts in thousands).

	2021	2020
Audit fees	$ 950	$ 812
Audit-related fees	61	58
Tax fees	—	—
All other fees	1	3
Total fees	$ 1,012	$ 873

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 Independent Accountant Pre-approval Policies and Procedures ("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 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 June 28, 2019, incorporated by reference to Exhibit 3.1 of our Quarterly Report on Form 10-Q (Commission File No. 000-51404) filed on August 12, 2019
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
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*+	Severance and Release Agreement, dated April 2, 2021, between Federal Home Loan Bank of Indianapolis and William D. Miller, incorporated by reference to Exhibit 10.1 of our Current Report on Form 8-K/A (Commission File No. 000-51404) filed on April 7, 2021
10.3*	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
10.4*	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
10.5*+	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
10.6*+	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
10.7*+	2016 Supplemental Executive Thrift Plan, effective January 1, 2016, adopted on November 20, 2015, as amended and restated July 29, 2020, effective January 1, 2021, incorporated by reference to Exhibit 10.1 to our Current Report on Form 8-K (Commission File No. 000-51404) filed on August 26, 2020
10.8*+	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
10.9*+	Directors' Compensation and Expense Reimbursement Policy, effective January 1, 2022, incorporated by reference to Exhibit 10.1 of our Current Report on Form 8-K (Commission File No. 000-51404) filed on December 21, 2021
10.10*+	Key Employee Severance Policy, re-adopted effective November 20, 2020, incorporated by reference to Exhibit 10.8 of our Annual Report on Form 10-K (Commission File No. 000-51404) filed on March 10, 2021

Exhibit Number	Description
10.11+	Key Employee Severance Policy, re-adopted effective November 19, 2021
10.12*+	Federal Home Loan Bank of Indianapolis Incentive Plan, effective January 1, 2012, as updated on January 25, 2019, effective as of January 1, 2019, incorporated by reference to Exhibit 10.10 of our Annual Report on Form 10-K (Commission File No. 000-51404) filed on March 8, 2019
10.13*+	Federal Home Loan Bank of Indianapolis Incentive Plan, effective January 1, 2012, as updated on November 15, 2019, effective as of January 1, 2020, incorporated by reference to Exhibit 10.1 of our current Report on Form 8-K (Commission File No. 000-51404) filed on January 28, 2020
10.14*+	Federal Home Loan Bank of Indianapolis Incentive Plan, effective January 1, 2012, as updated on December 16, 2020, effective as of 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
10.15*+	Severance Pay Plan, re-adopted effective November 20, 2020, incorporated by reference to Exhibit 10.11 of our Annual Report on Form 10-K (Commission File No. 000-51404) filed on March 10, 2021
10.16+	Severance Pay Plan, re-adopted effective November 19, 2021
24	Power of Attorney - Annual Report on Form 10-K for Fiscal 2021, dated January 21, 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 10, 2022

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 10, 2022
/s/ GREGORY L. TEARE **Gregory L. Teare** **(Principal Financial Officer)**	Executive Vice President - Chief Financial Officer	March 10, 2022
/s/ K. LOWELL SHORT, JR. **K. Lowell Short, Jr.** **(Principal Accounting Officer)**	Senior Vice President - Chief Accounting Officer	March 10, 2022
/s/ DAN L. MOORE* **Dan L. Moore**	Chair of the board of directors	March 10, 2022
/s/ KAREN F. GREGERSON* **Karen F. Gregerson**	Vice Chair of the board of directors	March 10, 2022
/s/ BRIAN D.J. BOIKE* **Brian D.J. Boike**	Director	March 10, 2022
/s/ MICHAEL E. BOSWAY* **Michael E. Bosway**	Director	March 10, 2022
/s/ CLIFFORD M. CLARKE* **Clifford M. Clarke**	Director	March 10, 2022
/s/ LISA D. COOK* **Lisa D. Cook**	Director	March 10, 2022
/s/ CHARLOTTE C. DECKER* **Charlotte C. Decker**	Director	March 10, 2022
/s/ ROBERT M. FISHER* **Robert M. Fisher**	Director	March 10, 2022

Signature	Title	Date
/s/ PERRY G. HINES* **Perry G. Hines**	Director	March 10, 2022
/s/ JEFFREY G. JACKSON* **Jeffrey G. Jackson**	Director	March 10, 2022
/s/ ROBERT D. LONG* **Robert D. Long**	Director	March 10, 2022
/s/ MICHAEL J. MANICA* **Michael J. Manica**	Director	March 10, 2022
/s/ LARRY W. MYERS* **Larry W. Myers**	Director	March 10, 2022
/s/ CHRISTINE COADY NARAYANAN* **Christine Coady Narayanan**	Director	March 10, 2022
/s/ SHERRI L. REAGIN* **Sherri L. Reagin**	Director	March 10, 2022
/s/ TODD E. SEARS* **Todd E. Sears**	Director	March 10, 2022
/s/ LARRY A. SWANK* **Larry A. Swank**	Director	March 10, 2022

* By: /s/ K. LOWELL SHORT, JR.
K. Lowell Short, Jr., Attorney-In-Fact

Exhibit 4.2

Federal Home Loan Bank of Indianapolis

Description of Securities Registered Under Section 12 of the Exchange Act

Description of Class B Stock Pursuant to 17 C.F.R. 229.601 and 17 C.F.R. 229.202

We have one class of capital stock, Class B Stock, which is authorized, issued, outstanding, and registered under Section 12 of the Securities Exchange Act of 1934, as amended. Class B Stock is issued under our capital plan, which was approved by the Federal Housing Finance Board (predecessor to the Federal Housing Finance Agency ("Finance Agency") on July 10, 2002, amended on October 9, 2002, and implemented on January 2, 2003, and most recently amended effective September 26, 2020. Class B Stock has a par value of $100 per share and may be issued, redeemed, and repurchased only at par value. Class B Stock is held in book-entry form only and is transferable only upon our written approval, which we may withhold in our sole discretion.

The Class B Stock has two subseries, Class B-1 and Class B-2. We are authorized under our Capital Plan to issue additional Class B Stock, at par value of $100 per share, to our members from time to time. Participation in such offerings is voluntary on the part of our members, on terms and conditions to be determined by our board, but such offerings may not discriminate in favor of or against any member. Class B-1 stock is utilized to meet a member's membership requirement, while subseries B-2 stock is utilized to meet a member's activity stock requirement. Subseries B-1 stock is reclassified as subseries B-2 as needed to help fulfill the member's activity stock requirement, and the member may be required to purchase additional subseries B-2 stock to fully meet that requirement. Excess subseries B-2 stock is automatically reclassified as subseries B-1. Additionally, members may opt-in to an activity stock requirement in connection with their sales of mortgage loans to us. Members may elect this stock requirement each time they enter into a master delivery contract with us.

The capital plan also permits our board of directors to authorize the issuance of Class A stock. However, the board has not authorized the issuance of Class A stock.

Terms Relating to Class B Stock

Conversion

Subseries B-1 stock may be reclassified as subseries B-2 stock as necessary to fulfill the activity stock requirement of a member if sufficient subseries B-2 Stock is not available to the member prior to such reclassification. Similarly, any subseries B-2 stock that is not needed to satisfy an activity stock requirement shall be automatically reclassified as subseries B-1 stock.

The only difference between the Subseries B-1 Stock and the Subseries B-2 Stock is that the dividend rate for the Subseries B-2 Stock may be equal to or greater than the dividend rate for the Subseries B-1 Stock, as described below.

If the board of directors authorizes the issuance of Class A Stock, the board may, authorize optional conversions of shares of Excess Stock (as defined below) to shares of a different class of Excess Stock (each such authorized conversion, a "Conversion Option") in accordance with certain restrictions in the Capital Plan. The board or management, as applicable, shall determine the maximum number of shares to be converted and shall establish a conversion date for any such Conversion Option. Members who wish to exercise a Conversion Option shall be notified by us of the process for exercising the option and shall advise us by the deadline specified in the notice of the amount of conversion-eligible Excess Stock they wish to have converted. If the Conversion Option is oversubscribed, then we will convert members' eligible shares on a *pro rata* basis. No capital stock that is the subject of an Excess Stock repurchase notice or a redemption notice shall be eligible for conversion to another class.

Liquidation Rights
Subject to the authority of the Finance Agency governing liquidations, if we are liquidated, following the retirement of all of our outstanding liabilities to our creditors, all shares of Class B Stock must be repurchased at par value, or if sufficient funds are not available to accomplish the repurchase in full of the Class B Stock at par value, then such repurchase will occur on a pro rata basis among all holders of the Class B Stock. Following the repurchase in full of all Class B Stock, any remaining assets will be distributed to the holders of Class B Stock in the proportion that each member's shares of Class B Stock bears to the total Class B Stock outstanding immediately prior to such liquidation.

Effect of Consolidation or Merger
Mergers and consolidations of Federal Home Loan Banks ("FHLBanks(s)") are governed by the Federal Home Loan Bank Act ("Bank Act") and Finance Agency regulations. In the event we consolidate or merge with another FHLBank, our members will become members of the surviving FHLBank. In such event, our members will either have their existing shares of Class B Stock converted into equivalent stock in the surviving FHLBank, or they will receive such other consideration as is provided in any plan of merger or consolidation or in any lawful order of the Finance Agency. If another FHLBank is merged into us and we are the surviving FHLBank, members of the non-surviving FHLBank will immediately become our members and the outstanding stock of the non-surviving FHLBank will be converted into shares of our Class B Stock, or they will receive such other consideration as is provided in any plan of merger or as provided in any lawful order of the Finance Agency.

Transfer of Stock
Shares of Class B Stock held by a member in excess of the amount the member needs to meet its membership and activity-based investment requirements ("Excess Stock") may be transferred to another member only upon our prior written approval, which may be withheld in our sole discretion. Such transfers must be made at par value and are effective upon being recorded in our stock records. Transferred shares that were subject to a notice of redemption will have the notice automatically cancelled upon the transfer, but no cancellation fee will be charged. All transfers shall be undertaken in accordance with Finance Agency regulations.

Voting Rights
All members holding shares of Class B Stock are entitled to vote for the election of directors pursuant to the Bank Act and Finance Agency regulations establishing the election procedure. Our district is comprised of the states of Indiana and Michigan. The election and voting for independent director seats are conducted district-wide. Member directors are elected by members in Indiana and Michigan separately as determined by the Finance Agency in its annual determination of the total number of directorships established for us and its annual allocation of member director seats per state. Member director seats can be added or taken away by the Finance Agency based upon increases or decreases in the amount of outstanding stock required to be held by the members in each state. The stock required to be held ("Stock Requirement") by each member is the greater of (i) its membership stock requirement, *i.e.*, the amount that the member must hold based on its total assets held ("Total Assets"), and (ii) its activity-based stock requirement, *i.e.*, the amount needed to support advances and other credit products used ("Activity-based Assets"). In the election of directors, members have one vote for each share of stock they hold to meet their Stock Requirement but are subject to caps on the number of shares they can vote, based upon the average number of shares of stock that are required to be held by all members in the applicable state. Members are not entitled to vote any shares of Excess Stock in the election of directors. The stock calculations required to determine the amount of shares eligible to be voted in each election are based upon each member's stock holdings on December 31 of the prior year. There are no voting preferences associated with any class or subseries of Class B Stock.

Classification of Board of Directors / Cumulative Voting
Each member of the board of directors is elected to a four-year term, and the directors' terms are staggered. In general, a director may serve no more than three consecutive four-year terms. There are no classes of directors, and there is no cumulative voting.

Liability for Capital Assessments
As more particularly described below, we may increase the minimum Stock Requirement of members:

- within certain ranges specified in the Capital Plan; and
- outside such ranges with approval from the Finance Agency.

Such an increase could result in a member being required to purchase additional stock or reduce its volume of activity in order to come into compliance with the new requirements. The failure of a member to comply with the new requirements would result in its access to products and services being suspended until the requirements are met, and failure to comply within ten business days may lead to the possible termination of its membership.

Dividends
Dividends may be, but are not required to be, paid on our Class B Stock. Historically, the board has declared dividends quarterly. Dividends, if declared, may be paid in either cash or stock, or a combination thereof. Our capital plan does not mandate a specific difference between subseries B-1 and subseries B-2 dividend rates. Rather, the board may set a dividend rate on subseries B-2 stock that is equal to or greater than the rate on subseries B-1 Stock. The calculation of the dividend to be paid is based on the average number of shares of each type held by the member during 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 our consolidated obligations issued to provide funds to us has not been paid in full or, under certain circumstances, if we fail to satisfy liquidity requirements under applicable Finance Agency regulations. Dividends are non-cumulative and, if declared, are paid only from current net earnings or retained earnings, and are subject to the application of our capital markets policy.

Redemption and Repurchase
As more particularly described below, Class B Stock is redeemable upon written notice from the member, subject to certain restrictions discussed below, after a period of five years ("Redemption Period") from the date of such notice. In addition, we may repurchase Excess Stock under certain circumstances. If a member at any time holds Excess Stock, we may, in our discretion, repurchase such Excess Stock at par value upon fifteen days' notice to the member. A member may identify, by date of acquisition, the shares of Excess Stock to be repurchased. A member may also request that we repurchase Excess Stock, resulting from the receipt of stock dividends or otherwise; however, we retain the discretion as to whether or not to repurchase shares of Excess Stock from a member.

A member may file a written request for us to redeem all or part of its Class B Stock. The Redemption Period will commence on the date of our receipt of the written notice. The redemption notice must identify the specific shares of Class B Stock that are to be redeemed by date of acquisition and amount. If the redemption notice fails to identify the particular shares to be redeemed, the member will be deemed to have requested redemption of the most recently acquired shares that are not already subject to a pending redemption request. At the end of the Redemption Period, only Class B Stock that has been held for at least five years and that is then Excess Stock can be used to fill the redemption request. A member may not have more than one notice of redemption outstanding at one time for the same shares of Class B Stock.

If an Excess Stock redemption request is filed, the member may cancel the redemption request at any time without penalty. Cancellations shall be applied first against capital stock needed to meet a member's Stock Requirement, and then against Excess Stock. A redemption request shall be automatically cancelled if we are unable to redeem the capital stock within five business days of the end of the redemption period, because such shares are needed to meet the member's Stock Requirement. If the redemption notice is cancelled, either by the member or automatically, the member may be required to pay a cancellation fee.

At the end of the Redemption Period, the member receives the par value of the stock being redeemed, unless the stock is then needed to support the member's Stock Requirement. All outstanding Activity-based Assets that are supported by the stock subject to the redemption request must be paid in full before the stock will be redeemed. Any shares of Excess Stock included in the redemption request will be redeemed.

If, at any time, the Redemption Period for stock owned by more than one member has expired, either with respect to stock subject to a redemption notice or stock of a terminated member, and if the redemption of such stock would cause us to fail to be in compliance with any of our minimum capital requirements, then we will fulfill such redemptions as we are able to accomplish from time to time. In that event, we would begin with such redemptions as to which the redemption period expired on the earliest date and fulfill such redemptions relating to that date on a pro rata basis from time to time until fully satisfied. Thereafter, we would fulfill such redemptions as to which the redemption period expired on the next earliest date in the same manner and continue in that order until all of such redemptions as to which the redemption period has expired have been fulfilled.

If a member has one or more redemption requests outstanding as of the date of repurchase of shares of capital stock under redemption and has not identified specific shares to be repurchased, we will first repurchase the most recently acquired shares of Class B Stock of a member that are Excess Stock and that are subject to a redemption request, followed by Excess Stock that is subject to a redemption request that has been outstanding for the next shortest period of time and continue in that order, to the extent necessary, until the member no longer has any Excess Stock, or we have repurchased all of the Excess Stock of the member that we had intended to repurchase.

Any stock that we redeem or repurchase will be retired and will no longer be deemed to be outstanding stock.

Withdrawal or Termination of Membership

Any member may voluntarily withdraw from membership upon written notice to us. Further, an institution's membership may be involuntarily terminated in accordance with regulations of the Finance Agency in effect from time to time, or its membership may be terminated (i) by operation of law if it is the non-surviving entity in a consolidation or merger with a non-member, another member, or an institution outside our district, or (ii) if it relocates outside our district.

Any member that withdraws from membership or that has had its membership terminated may not be readmitted as a member of any FHLBank for a period of five years from the date membership was terminated and all of the member's stock was redeemed or repurchased. A transfer of membership without interruption between two FHLBanks will not constitute a termination of membership.

A voluntarily withdrawing member may continue to do business with us during the Redemption Period of the stock held by the member at the time of its notice of withdrawal. If such business requires that member to purchase additional stock, different Redemption Periods will apply to the newly-purchased stock.

Capital Requirements and the Capital Plan

Regulatory Capital Requirements

The Bank Act and Finance Agency regulations require that each FHLBank maintain permanent capital and total capital in sufficient amounts to comply with specified, minimum risk-based capital and leverage capital requirements. Permanent capital is defined as the amount we receive for our Class B Stock (including mandatorily redeemable stock) plus our retained earnings. Permanent capital must at least equal our risk-based capital requirement, which is defined as the sum of credit risk, market risk, and operations risk capital requirements. Each of these risks is measured in accordance with Finance Agency regulations. Total capital is defined as permanent capital, plus the paid-in value of any Class A stock, plus a general allowance for losses, plus any other amounts determined by the Finance Agency to be available to absorb losses. Total capital must equal at least 4% of total assets. Leverage capital is defined as 150% of permanent capital plus the sum of all other components of capital. Leverage capital must equal at least 5% of total assets. From time to time, for reasons of safety and soundness, the Finance Agency may require one or more of the individual FHLBanks to maintain more permanent capital or total capital than is required by the regulations.

Our authority to redeem or repurchase Class B Stock is subject to a number of regulatory limitations. Specifically, we will not redeem any stock, (notwithstanding the expiration of the Redemption Period), or repurchase any stock: (i) if we are not in compliance with each of our capital requirements; (ii) if the redemption or repurchase would cause us to fail to meet our capital requirements; or (iii) absent approval of the Finance Agency, if we determine or the Finance Agency determines that we have incurred or are likely to incur losses that will result in a charge against our capital.

We also may, subject to certain conditions, suspend redemptions of Class B Stock if we reasonably believe that continued redemption of stock (i) would cause us to fail to meet our minimum capital requirements; (ii) would prevent us from maintaining adequate capital against potential risk that may not be adequately reflected in our minimum capital requirements; or (iii) would otherwise prevent us from operating in a safe and sound manner. During the period of any such suspension of redemptions, we may not repurchase any stock without the approval of the Finance Agency and may be required by the Finance Agency to re-institute the redemption of Class B Stock. In addition, if we reasonably determine that the stock subject to redemption must be maintained as collateral for a member's then-outstanding obligations, we may redeem the stock but will maintain the proceeds in a collateral account until they are no longer needed as collateral.

Stock Investment by Members

Under our capital plan, members are required to purchase and hold Class B Stock based upon the greater of a percentage of the member's total assets (its membership stock requirement) or the member's activity-based stock requirement, with a minimum investment of $7,500. The Capital Plan currently provides for the calculation of the membership stock requirement to be based upon a percentage of the member's total assets which is established by the board of directors within a range of 0.01% to 0.5%, and the membership stock requirement is subject to a maximum stock purchase in an amount established by the board of directors within a specified range. The activity-based stock requirement is currently set at the total of the following percentages of a member's Activity-based Assets:

- Credit Products:
  - Advances: 4.5%;
  - Lines of Credit: 4.5%;
  - Standby Letters of Credit: 0.1%;
- Derivative Contracts: 4.5%; and
- Acquired Member Assets: 0.0%, unless a member elects to opt-in to a stock purchase requirement for sales of MPP, in which case it is 4.5%.

However, the Capital Plan authorizes our board, in its discretion, to change these percentages within the following respective ranges.

- Total Assets: 0.01% to 0.5%;

- Credit Products:
  - Advances: 1.0% to 6.0%;
  - Lines of Credit: 1.0% to 6.0%;
  - Standby Letters of Credit: 0.1% to 6.0%;
  - Derivative Contracts: 1.0% to 6.0%; and
  - Acquired Member Assets: 0.0% to 6.0%.

Changes in the activity-based stock requirement percentages may, at the discretion of our board, be applied prospectively only as to Activity-based Assets acquired after the date of the notice of the change. Changes outside these ranges would require prior approval from the Finance Agency. An increase in any of the percentages would generally require members to purchase additional shares of Class B Stock.

Each member's Stock Requirement will change from time to time based upon changes in a member's total assets or Activity-based Assets. Total assets are calculated annually on or about April 1, based upon a member's financial statements as of December 31 of the prior year. The activity-based stock requirement will be recalculated whenever a member enters into an Activity-based Asset. To the extent that a member does not hold sufficient Excess Stock, the member must comply with any associated requirement to either purchase additional Class B Stock at the time a new Activity-based Asset is entered into and for as long as the Activity-based Asset is outstanding. We also have the right to recalculate a member's Stock Requirement at any time, using the most recent financial statements and account balance information available to us at the date of recalculation. If a member fails to purchase or convert the additional stock necessary to comply with a recalculated Stock Requirement, its access to our products and services will be suspended until such requirements are met, and any failure to make such stock purchases or conversions within 10 business days from the required purchase date may result in involuntary termination of membership.

If our board adjusts the percentages used in calculating the Stock Requirement, the adjustment will go into effect not less than 15 days after declaration by the board and notice to the members. Any member that fails to comply with the new Stock Requirement on the date it becomes effective will not be able to access our products or services until such requirements are met and, if the failure continues for at least 10 business days, the member may be involuntarily terminated. Members that have filed a notice of withdrawal from membership or that have had their membership otherwise terminated are not required to meet any increases in the Stock Requirement based upon changes in the membership stock requirement percentage or in the activity-based stock requirement percentages while the notice is pending or subsequent to such termination unless new Activity-based Assets are acquired. Changes in the activity-based stock requirement percentages will be applied to a member's outstanding and new Activity-based Assets (or if the percentage change was prospective only, then only to new Activity-based Assets).

Exhibit 10.11

Board Approved
November 19, 2021

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. <u>Successor to the Bank.</u>

(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 10.16
Board Approved
November 19, 2021

FEDERAL HOME LOAN BANK OF INDIANAPOLIS
SEVERANCE PAY PLAN

PURPOSE:

This Severance Pay Plan ("Plan") is intended to protect an employee(s) from financial hardships due to the loss of their job through no fault of their own. It is designed to provide income during a limited period while the employee looks for other employment and to compensate the employee for the loss of their employment with the Bank. It is nondiscriminatory and provides for payment of severance benefits to all eligible employees upon involuntary termination as provided for under the requirements of this Plan.

EMPLOYMENT STATUS:

This Plan applies to full-time and part-time employees. It does not apply to temporary, leased, internship or contract employees.

QUALIFYING EVENTS:

The following qualifying events will trigger an employee's right to severance benefits:

1. The elimination of a job or position.
2. A reduction in force.
3. A substantial job modification, to the extent the incumbent employee is no longer qualified for, or is unable to perform, the restructured job.
4. The reassignment of staff requiring the relocation by more than 75 miles of the employee's primary residence.
5. The termination of employment of an employee with the Bank resulting from the sale, merger or acquisition of the Bank by another entity.

SEPARATION CONTRACT

The receipt of severance benefits under this Plan is made expressly conditional on the separated employee's execution of a binding separation contract ("Separation Contract"). The Separation Contract will include an outline of the severance payments benefit granted under this Plan (in excess of two weeks' pay and other short-term benefit payments made by the Bank to terminating employees, which represents the binding consideration for obtaining the legal release), and Additional Benefits, if any, determined in accordance with the "Additional Benefits" provision below , and shall provide a general legal release by the employee of any claims against the Bank relative to the involuntary termination as well any other claims arising out of or relating to employment with the Bank. The waiver shall apply to all claims arising on or before the date the Separation Contract is to be executed. The Bank expressly reserves the right to negotiate additional conditions, including covenants not to compete, as appropriate on a case by case basis.

Employees who are age 40 or older shall, unless otherwise required by law, have a period of at least 21 days to consider the Separation Contract. In cases where an early retirement program is offered to a group or class of employees, the review period for employees age 40 or older will be extended to 45 days as required by the Older Workers Benefit Protection Act of 1990.

DISQUALIFYING EVENTS:

The following events will disqualify an employee from receiving severance benefits:

1. The acceptance of or refusal to accept a transfer of job assignment within the Bank which does not require relocation of the employee's primary residence as described above.
2. The acceptance of or refusal to accept new employment offered by the acquiring company (regardless of whether the job is voluntarily offered by the legal successor or triggered by the terms of the sale) for a generally comparable job position which does not require relocation of the employee's primary residence as described above.
3. Retirement from the Bank under conditions not involving elimination or termination of the job, including the acceptance of an early retirement incentive plan provided to a group of employees.
4. Voluntary termination of employment.
5. Involuntary termination of employment, "for cause," or "unacceptable job performance" as interpreted by the Bank. "For cause" terminations will generally disqualify an employee from receiving severance benefits. The Bank, however, reserves the right to use judgment on a case by case basis.
6. Failure to report back to the Bank upon expiration of an approved leave of absence during which the eligibility for severance occurs.
7. Resignation prior to a scheduled release date.

SEVERANCE BENEFIT PAYMENT:

Employees eligible for the Bank's severance benefit will be paid in a one-time, lump sum payment. All such payments are subject to Federal, State and other withholdings required by law.

SEVERANCE BENEFIT:

The severance benefit is based on the employee's level in the organization and number of years of service. Years of service with the Bank shall be continuous, unless otherwise waived by the Bank. The pay level used for calculation purposes is the employee's annual base pay in effect at the time of a qualifying event occurring.

SEVERANCE PAY SCHEDULE

LEVEL	# WEEKS BASE PAY PER YEAR OF SERVICE	MINIMUM	MAXIMUM
Nonexempt	2	2	26
Exempt	2	2	26
Officer	2	4	52
Senior Officer*	4	8	52

*If an employee has an agreement with the Bank, or is a participant under a Board-approved policy or program, that contains provisions for the payment of severance pay as a result of a qualifying event (such as a change of control), and payment under such agreement, policy, or program has been triggered as to the employee, the provisions contained in the agreement, policy or program shall control over the terms of this severance pay schedule.

TERMINATION DATE:

Employment is considered terminated on the employee's release date as specified by the Bank. Any payments received after that date are considered severance pay and are not considered salary.

BENEFITS:

Current COBRA requirements allow the terminating employee, at his or her option, to continue health insurance coverage for a specified period of time after termination. The employee is responsible for the payment of the premiums. The Bank will pay the employee in a lump sum payment the amount of such premiums for the time period applicable under the severance pay Schedule set forth in the table above, in addition to the severance pay.

Bank benefits will terminate according to the provisions of the respective benefit plans in effect on the employee's release/termination date. Accrued and unused annual vacation pay benefits, as of the date of the release, shall be paid in a lump sum in addition to the severance pay and insurance payment. The Bank will honor any previously approved tuition reimbursement program where the employee is attending classes in the current semester as of the date of the employee's termination. The Bank will waive any reimbursements required to be made by the employee to the Bank under any educational assistance program.

CLAIM REVIEW PROCEDURE:

If an employee, his/her dependent, or beneficiary objects to the Bank's determination of the amount of benefits to which he/she is entitled under this Plan, such person may, within sixty days following denial of the benefits for which he/she has applied, file with the Bank, a written claim objecting to the determination of the amount of his/her benefits payable under this Plan. The claimant or his/her representative may review Plan documents which relate to the claim and may submit written comments to the Bank, Attention: Chief HR & Diversity, Equity and Inclusion Officer. The Bank shall render a written decision concerning the claim not later than ninety days after receipt of such claim. If the claim is denied, in whole or in part, such decision shall include (a) the reason or reasons for the denial; (b) a reference to the Plan provision constituting the basis of the denial; (c) a description of any additional material or information necessary for the claimant to perfect his/her claim; (d) an explanation as to why such information or material is necessary; and (e) an explanation of the Plan's appeal procedure. The claim shall be deemed to be denied if no response is received by the end of the review period. The claimant may file with the Bank a written notice of appeal of the Bank's decision not later than sixty days after receiving the Bank's written decision. The Bank shall render a written decision on the appeal not later than sixty days after the appeal. Such decision shall include the specific reasons for the decision, including a reference to the Plan's specific provisions where appropriate. The Bank may extend the foregoing ninety- and sixty-day periods during which it must respond to the claimant by up to an additional ninety- and sixty- days respectively, if special circumstances beyond its control so require; provided that notice of such extension is given to the claimant prior to the expiration of the initial ninety- or sixty-day period, as the case may be.

After this claim review procedure is exhausted, the Bank's Mandatory Mutual Agreement To Arbitrate procedures for the Bank and employee shall control.

REEMPLOYMENT OPPORTUNITIES:

An employee subject to the provisions of this Plan may or may not be eligible for reemployment, at the Bank's discretion.

ADDITIONAL BENEFITS:

Additional pay or outplacement services, in the sole discretion of the Bank, may be granted to amicably resolve employment separations. These Additional Benefits, if granted, shall be detailed in the Separation Contract.

ADMINISTRATION/RESPONSIBILITIES:

This Severance Plan 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 Plan, including determinations of job comparability under the Disqualifying Events section of this Plan, 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.

Division Heads are responsible for identifying and justifying, in writing, any reductions in force. Final approval of any reductions in force is required from the Bank's President-CEO (or if the position is vacant, the person(s) acting in that capacity and the Chief HR & Diversity, Equity and Inclusion Officer). Approvals of reductions in force or position

eliminations resulting from the sale of the Bank or any of its business functions or divisions require the approval of the Board of Directors or its authorized delegates.

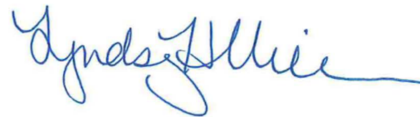
Bank managers are responsible for ensuring that the application of this Plan is made on a non-discriminatory basis without regard to race, color, religion, national origin, sex, age, sexual orientation, gender identity, genetic information, veteran's status, parental status, pregnancy status, citizenship 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.

The Bank reserves the right to amend, modify or terminate this Plan, in whole or in part, at any time it deems appropriate. This Plan does not, and is not intended to, create any contractual rights in favor of any employee or the Bank (unless a Separation Contract is offered to and executed by a particular employee and is accepted by the Bank). While the Bank may grant special consideration to affected employees, Bank management reserves the right to make any employment decision, at any time, deemed to be in the best interest of the Bank, and employment with the Bank may be terminated at any time, with or without cause.

All prior Severance Plans of the Bank are hereby rescinded.

The Severance Pay Plan was reviewed by resolution of the Board of Directors at its November 19, 2021 meeting, and shall be effective until amended or rescinded by the Board of Directors.

FEDERAL HOME LOAN BANK OF INDIANAPOLIS
BOARD OF DIRECTORS



By:
Lyndsay H. Miller
Its: Corporate Secretary

EXHIBIT 24

POWER OF ATTORNEY
ANNUAL REPORT ON FORM 10-K FOR FISCAL 2021

KNOW ALL PERSONS BY THESE PRESENTS that each of the undersigned Directors of the Federal Home Loan Bank of Indianapolis (the "Bank") hereby constitutes and appoints Cindy L. Konich (Principal Executive Officer), Gregory L. Teare (Principal Financial Officer) and K. Lowell Short, Jr. (Principal Accounting Officer), or any of them, his or her true and lawful attorneys-in-fact and agents, with full power of substitution and revocation, to execute any and all instruments that said attorneys-in-fact and agents, or any of them, may deem necessary or advisable or may be required to enable the Bank to comply with the Securities Exchange Act of 1934, as amended (the "1934 Act"), and any rules, regulations or requirements of the Securities and Exchange Commission (the "Commission") in respect thereof, in connection with the filing under the 1934 Act of the Bank's Annual Report on Form 10-K for the year ended December 31, 2021 (the "2021 Annual Report"), including specifically, but without limiting the generality of the foregoing, power and authority to sign the name of each of the undersigned in the capacity of Director of the Bank to the 2021 Annual Report to be filed with the Commission and to any instruments or documents filed as part of or in connection with the 2021 Annual Report, including any amendments or supplements thereto; and granting unto each of said attorneys-in-fact and agents full power and authority to do and perform each and every act and thing requisite and necessary to be done, as fully to all intents and purposes as the undersigned might or could do in person, and each of the undersigned hereby ratifies and confirms all that said attorneys-in-fact and agents, or any of them, shall do or cause to be done by virtue hereof.

This power of attorney will be governed by and construed in accordance with the laws of the State of Indiana. This power of attorney will remain in effect until revoked by a resolution of the Bank's Board of Directors as to all signatories, or as to any individual signatory by delivery of a written revocation by such individual signatory to the Bank's Corporate Secretary. The execution of this power of attorney is not intended to, and does not, revoke any prior powers of attorney. This power of attorney may be executed in multiple counterparts, each of which shall be deemed an original with respect to the person executing it, but which taken together, shall constitute one instrument.

IN WITNESS WHEREOF, each of the undersigned has subscribed these presents this 21st day of January, 2022.

FEDERAL HOME LOAN BANK OF INDIANAPOLIS

/s/ Dan L. Moore
Dan L. Moore, Chair

/s/ Karen F. Gregerson
Karen F. Gregerson, Vice Chair

/s/ Brian D.J. Boike
Brian D.J. Boike

/s/ Michael E. Bosway
Michael E. Bosway

/s/ Clifford M. Clarke
Clifford M. Clarke

/s/ Lisa D. Cook
Lisa D. Cook

/s/ Charlotte C. Decker
Charlotte C. Decker

/s/ Robert M. Fisher
Robert M. Fisher

/s/ Perry G. Hines
Perry G. Hines

/s/ Jeffrey G. Jackson
Jeffrey G. Jackson

/s/ Robert D. Long
Robert D. Long

/s/ Michael J. Manica
Michael J. Manica

/s/ Larry W. Myers
Larry W. Myers

/s/ Christine Coady Narayanan
Christine Coady Narayanan

/s/ Sherri L. Reagin
Sherri L. Reagin

/s/ Todd E. Sears
Todd E. Sears

/s/ Larry A. Swank
Larry A. Swank

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 10, 2022

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 10, 2022

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 10, 2022

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, 2021, 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 10, 2022

By: /s/ GREGORY L. TEARE
Gregory L. Teare
Executive Vice President - Chief Financial Officer
March 10, 2022

By: /s/ K. LOWELL SHORT, JR.
K. Lowell Short, Jr.
Senior Vice President - Chief Accounting Officer
March 10, 2022