

# Credit Risk Transfer Handbook

May 2023



Freddie Mac is dedicated to improving the U.S. housing finance system. Our Single-Family Credit Risk Transfer (CRT) program, established in 2013, is designed to reduce credit risk exposure to U.S. taxpayers while providing unique opportunities for the private sector to participate in the U.S. single-family residential credit market.

The goal of this handbook is to familiarize the private sector with Freddie Mac's complementary capital markets and (re)insurance CRT executions, STACR® and ACIS®. It also provides a close-up of Freddie Mac's risk management framework and quarterly U.S. housing statistics.

--Mike Reynolds, Vice President, Single-Family Credit Risk Transfer



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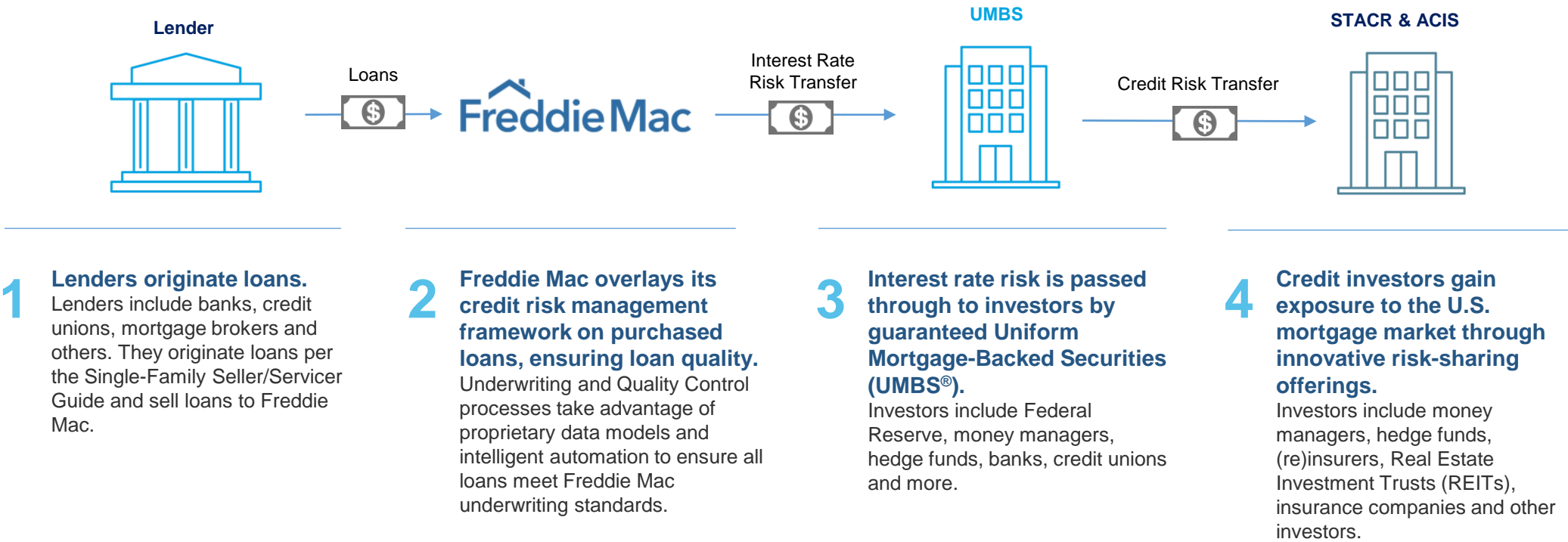
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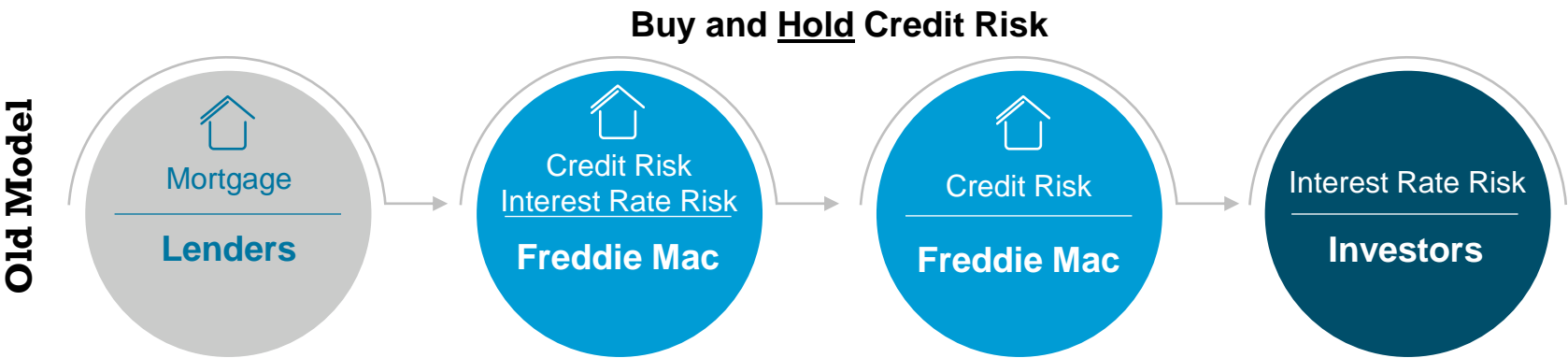
# Development of an Asset Class

# Freddie Mac's Role in U.S. Housing Finance

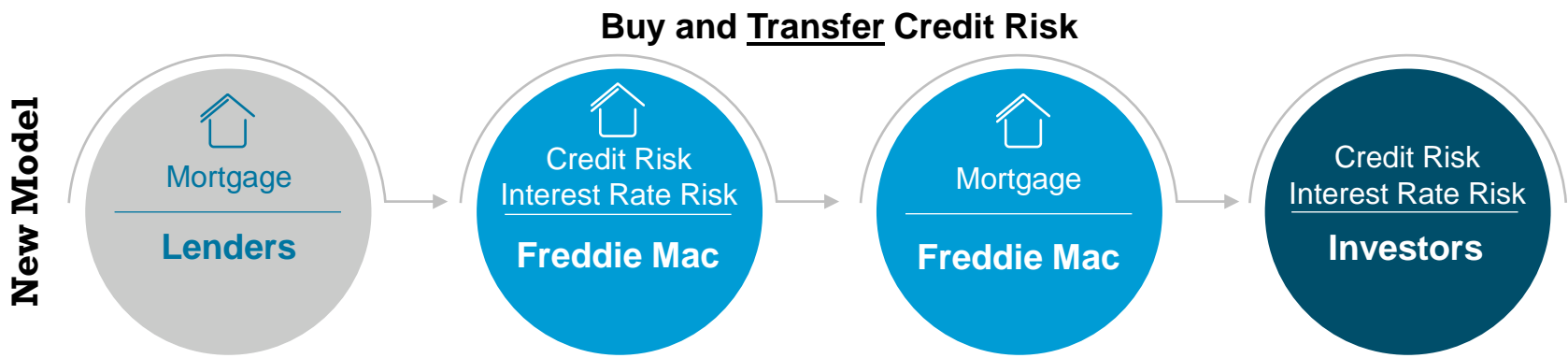
Freddie Mac was chartered by the federal government in 1970 to provide liquidity, stability, and affordability to the housing market.



# Sustainable Business Model



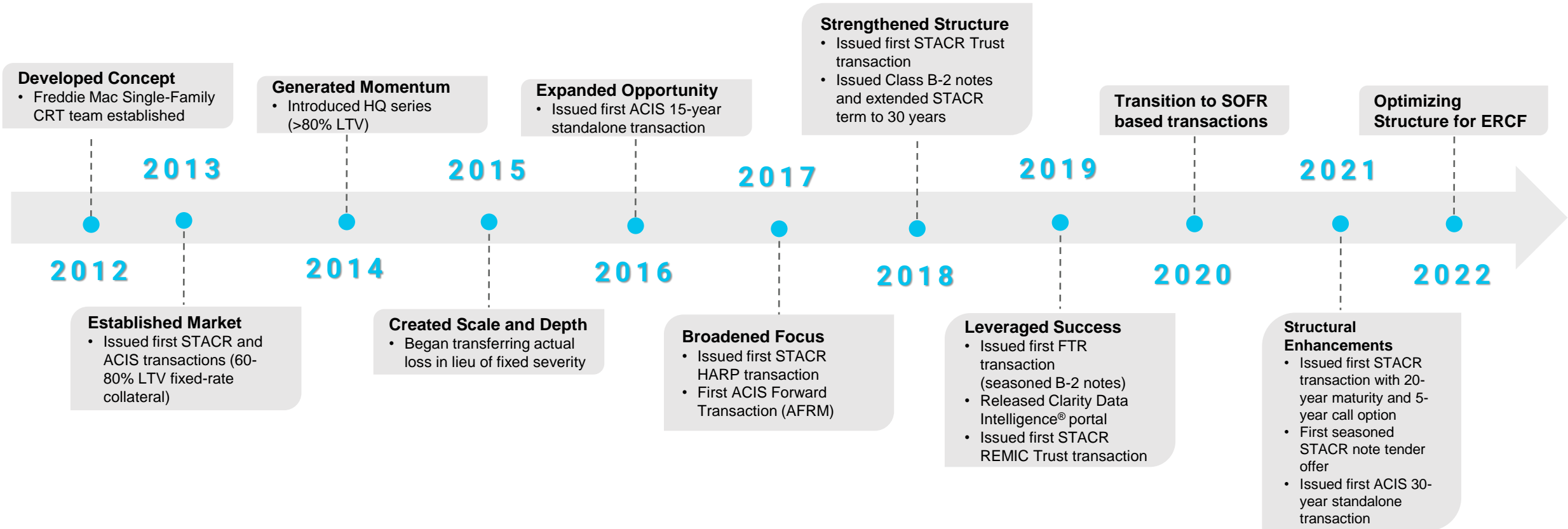
**Interest Rate Risk Transfer**  
**Uniform Mortgage-Backed Securities (UMBS):** Pass-through securities representing an undivided interest in a pool of residential mortgages which transfer interest rate risk to investors. Freddie Mac guarantees the timely payment of interest and scheduled principal on all UMBS' issued by Freddie Mac.



**Credit Risk Transfer**  
**Structured Agency Credit Risk (STACR®) Trust:** Freddie Mac's flagship securitization credit risk sharing vehicle. STACR transactions transfer risk to the private capital markets through the issuance of unsecured and non-guaranteed notes. The bankruptcy-remote trust makes periodic payments of principal and interest on the notes to investors.

**Agency Credit Insurance Structure (ACIS®):** Freddie Mac's flagship insurance-based credit risk sharing vehicle. ACIS transactions are insurance policies issued by or ceded to global (re)insurance companies to cover a portion of credit risk on the STACR or standalone reference pools. Freddie Mac pays monthly premiums to (re)insurers, based on their tranche participation, in exchange for claim coverage on their portion of the reference pool.

# Timeline



# Single-Family CRT by the Numbers



**Source:** Freddie Mac, as of May 2023.  
**Note:** Includes STACR, ACIS, certain senior subordination securitization structures, and certain lender risk-sharing transactions.

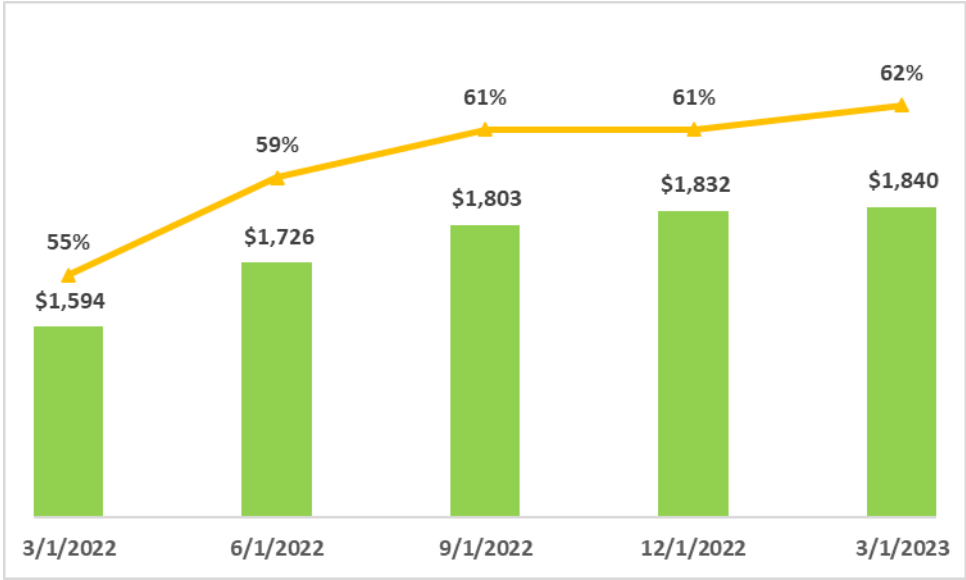


# CRT Issuance and Portfolio Coverage

UPB Covered by New CRT Issuance (\$Billions)



Mortgage Portfolio with Credit Enhancement (\$Billions)



Source: Freddie Mac, as of Q1 2023.

## SECURITIES

### STACR®

Structured Agency Credit Risk

Freddie Mac Single-Family’s flagship CRT offering, where non-guaranteed notes are issued across multiple tranches, and reference pool performance determines payments.

#### Series

- DNA:** On-the-run, original LTV of 61-80%
- HQA:** On-the-run, original LTV of 81-97%
- HRP:** HARP and Relief Refi collateral
- FTR:** Off-the-run, seasoned B collateral
- SPI:** Fully collateralized non-synthetic transactions

## (RE)INSURANCE CONTRACTS

### ACIS®

Agency Credit Insurance Structure

Freddie Mac’s flagship (re)insurance offering provides (re)insurers the opportunity to gain broad exposure to the U.S. housing market on a direct or reinsurance basis.

#### Series

- DNA:** On-the-run, original LTV of 61-80%
- HQA:** On-the-run, original LTV of 81-97%
- SPL:** Standalone, original LTV of 61-80%
- SPH:** Standalone, original LTV of 81-97%
- SAP:** 15/20/30-year collateral
- ARMR:** HARP and Relief Refi collateral
- FTR:** Off-the-run, seasoned B collateral
- AFRM:** Forward transactions
- AFH:** Forward transactions, original LTV of 81-97%
- COR:** Cash Out Refinances, original LTV of 50-60%

# Clarity Updates



Beginning May 2023, both CRT dashboards and mortgage-backed securities (MBS) analytic data is available through Clarity.

Reminder: Login is required to access Clarity.

## New Look

Primary driver for changes:

- To align with Freddie Mac's corporate standards and industry best practices
- To build out a more flexible framework for future enhancements and ability to customize

## New Dashboards

After logging into Clarity, you'll have the option to choose between viewing CRT or MBS portals. While CRT dashboards will remain unchanged, if you choose to view MBS dashboards, you'll have access to:

- **NEW!** Daily Prepayment Report – Cumulative Daily Voluntary Payoffs by Cohort
- Affordable and Green BS Issuance Volume
- Structured Transaction Issuance Reports

## Notable Changes

**NEW!** STACR Reference Pool disclosures in EU template format

Filters are now in the upper right-hand corner

Easier navigation for each page by fixing the screen width and locking the headers

Benchmarks are displayed more clearly in a separate section

[Clarity.FreddieMac.com](https://Clarity.FreddieMac.com)

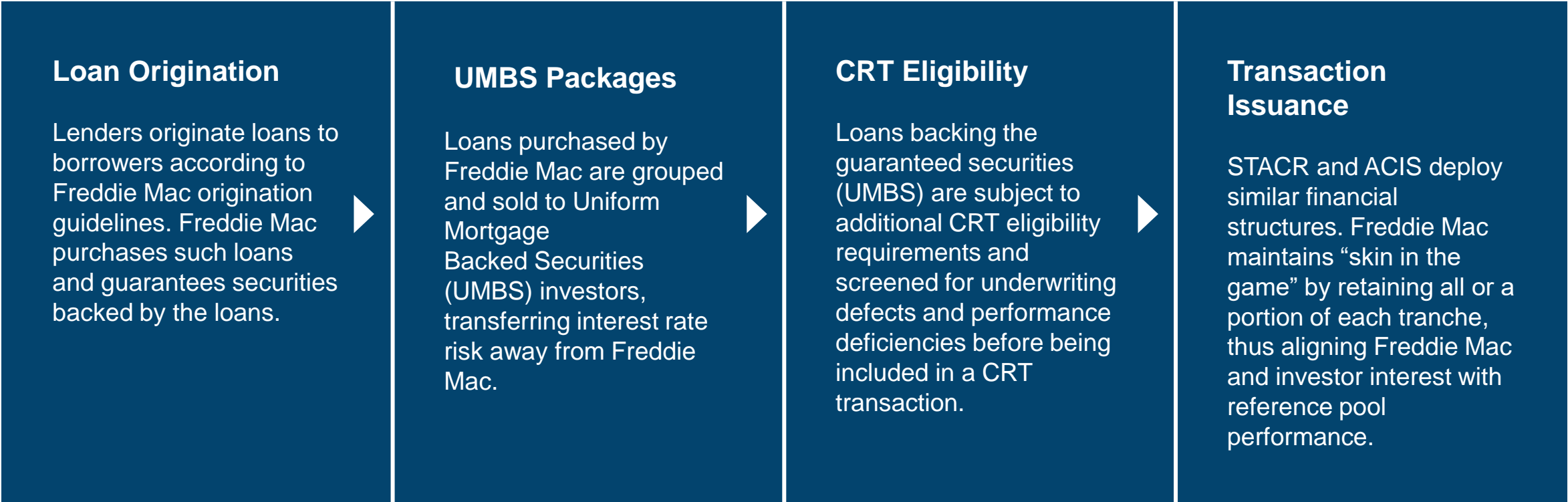


STACR<sup>®</sup> and ACIS<sup>®</sup>

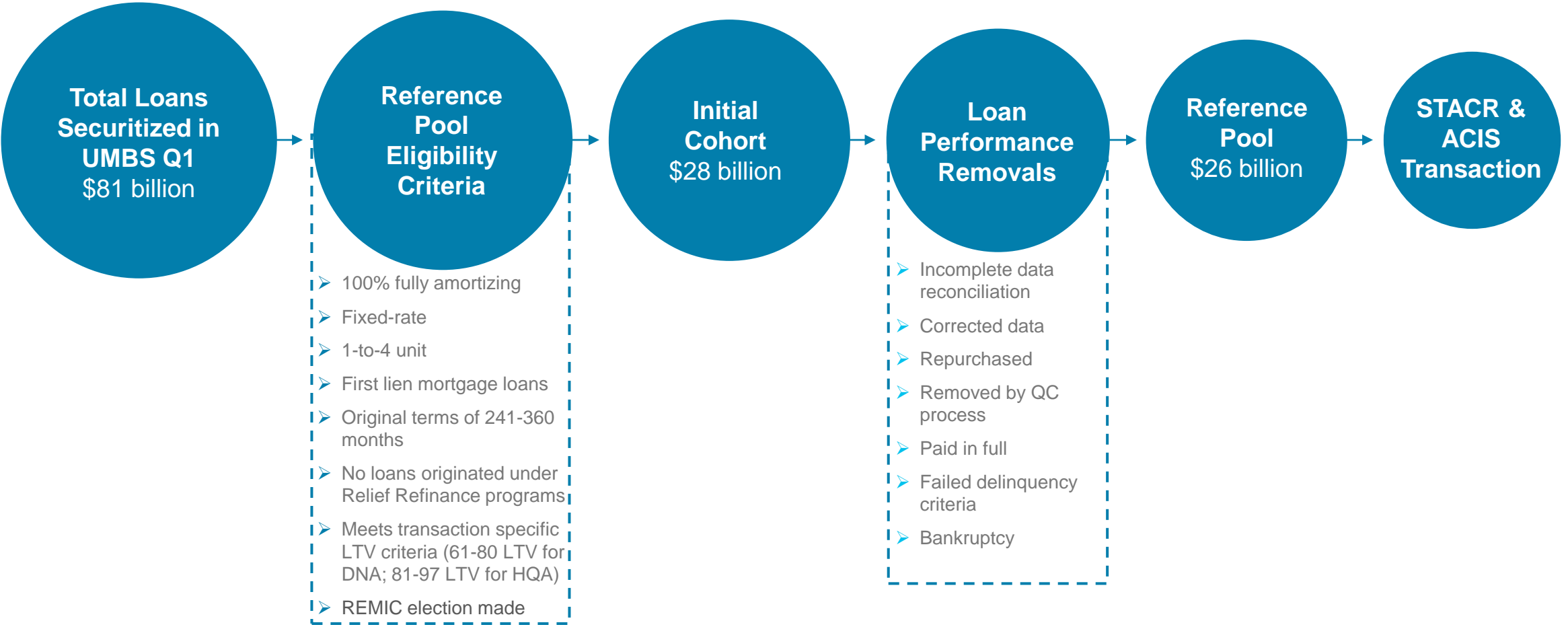


STACR and ACIS

# 1. Transaction Overview



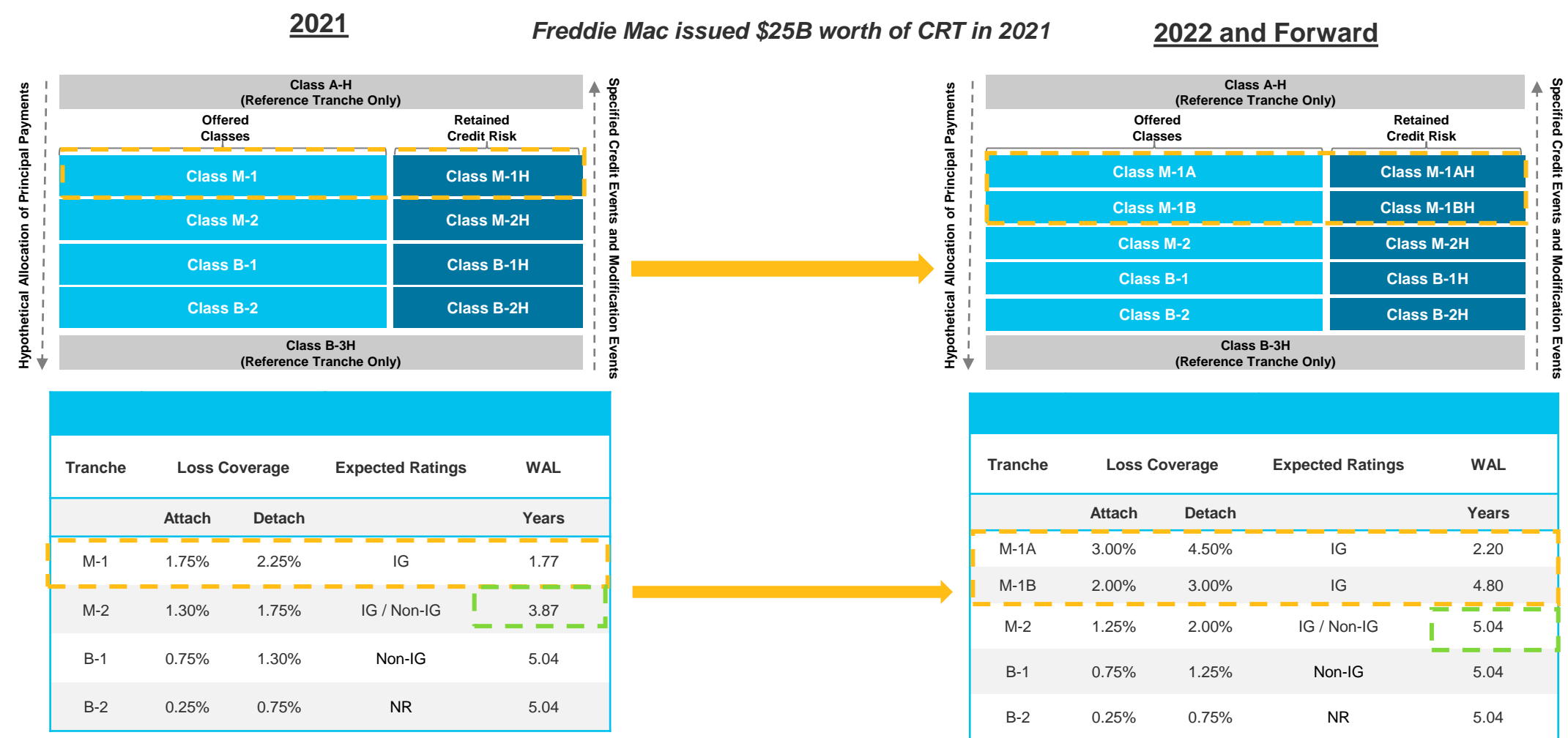
# Reference Pool Creation Illustration



# Enhanced STACR Structure

## Introduction of M-1A and M-1B Classes

Available on our Resource Hub: [Looking Ahead - CRT in 2023](#)

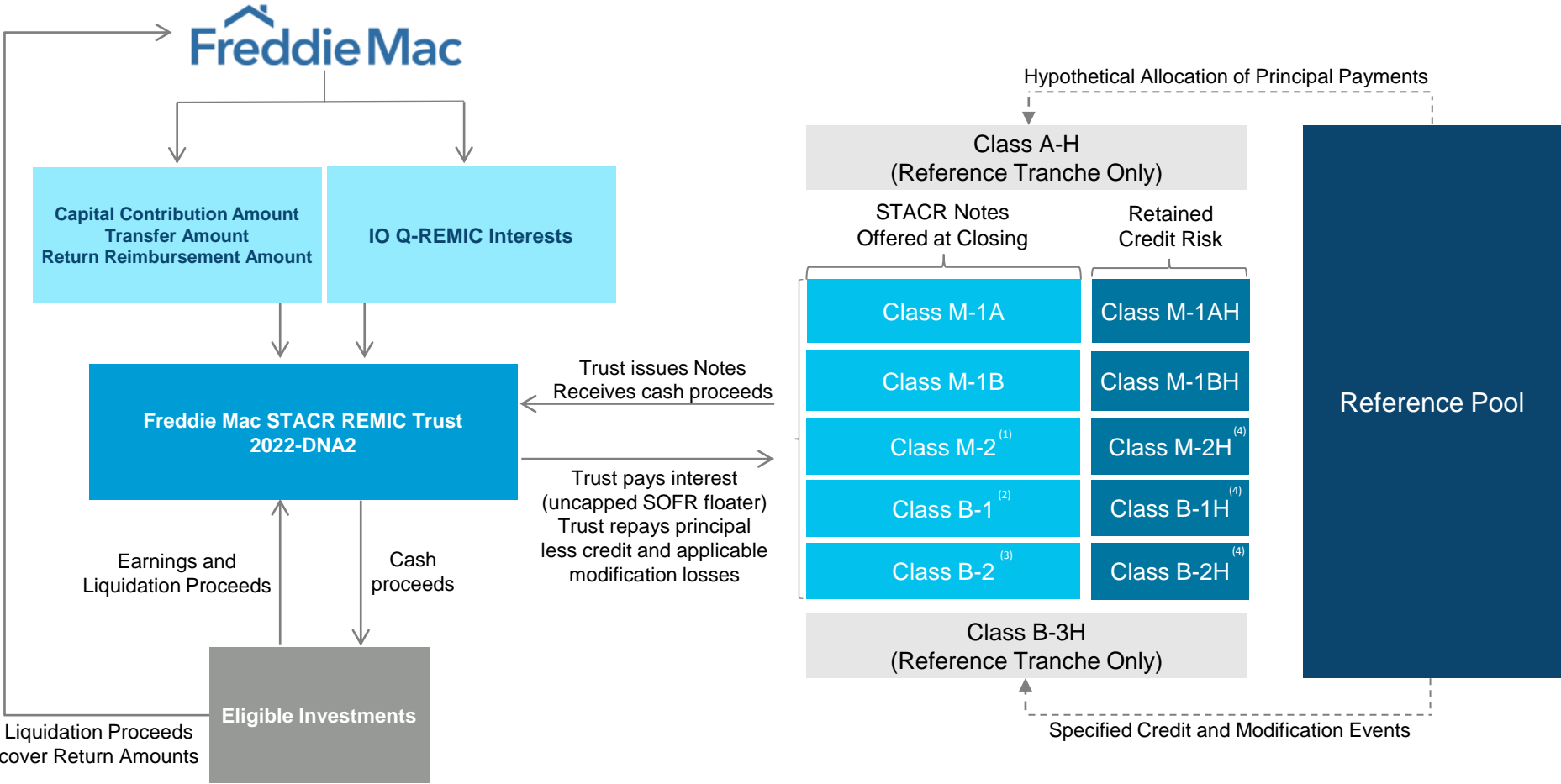


STACR and ACIS are complementary programs that can issue on a linked basis using the same reference pool. Delinked transactions have also been used to transfer risk for on-the-run deals.

Source: Freddie Mac  
Notes: Illustrative purposes only. Final structures may vary by deal. IG = Investment-Grade or higher



# STACR REMIC Structure

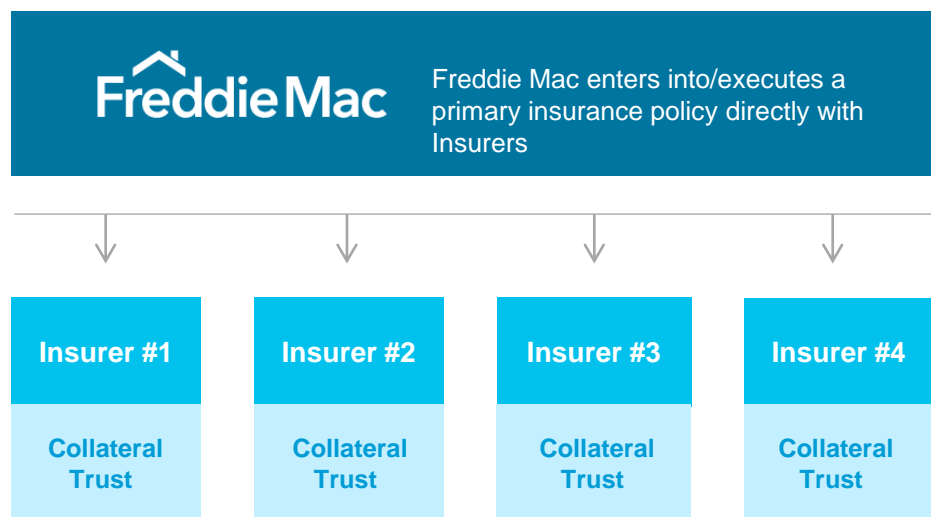


- (1) The Class M-2A and Class M-2B Notes and corresponding Reference Tranches relate to the Class M-2 Notes. The Class M-2A and Class M-2B Notes are exchangeable for the Class M-2 Notes, and vice versa, as further described in the Term Sheet and Preliminary PPM. In addition, certain Classes of MACR Notes can be further exchanged for other Classes of MACR Notes, and vice versa, as further described in the Term Sheet and Preliminary PPM.
- (2) The Class B-1A and Class B-1B Notes and corresponding Reference Tranches relate to the Class B-1 Notes. The Class B-1A and Class B-1B Notes are exchangeable for the Class B-1 Notes, and vice versa, as further described in the Term Sheet and Preliminary PPM. In addition, certain Classes of MACR Notes can be further exchanged for other Classes of MACR Notes, and vice versa, as further described in the Term Sheet and Preliminary PPM.
- (3) The Class B-2A and Class B-2B Notes and corresponding Reference Tranches relate to the Class B-2 Notes. The Class B-2A and Class B-2B Notes are exchangeable for the Class B-2 Notes, and vice versa, as further described in the Term Sheet and Preliminary PPM. In addition, certain Classes of MACR Notes can be further exchanged for other Classes of MACR Notes, and vice versa, as further described in the Term Sheet and Preliminary PPM.
- (4) The Class M-2H Reference Tranche illustrated in the transaction diagram above represents the combination of the Class M-2AH and Class M-2BH Reference Tranches. The Class B-1H Reference Tranche represents the combination of the Class B-1AH and Class B-1BH Reference Tranches. The Class B-2H Reference Tranche represents the combination of the Class B-2AH and Class B-2BH Reference Tranches.

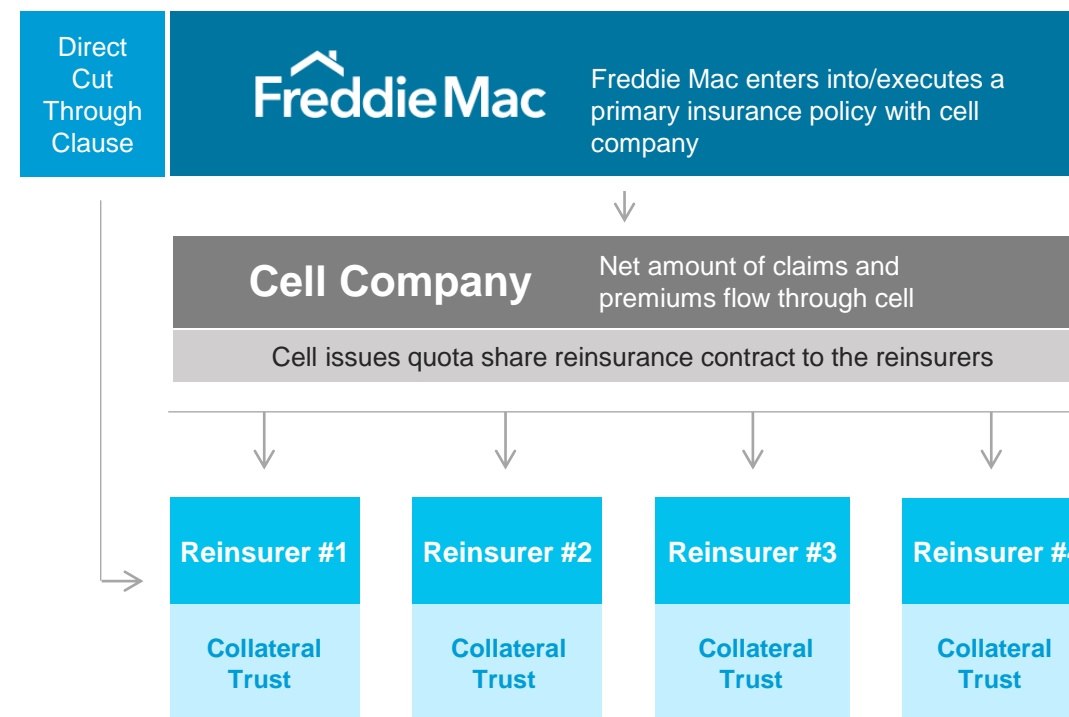
# ACIS (Re)Insurers May Write on a Direct or Indirect Basis



## Direct Policy



## Indirect Policy



Reinsurers, based on their license, have option to contract directly or indirectly (via cell company) with Freddie Mac.

# Transaction Example and Program Comparisons



Tranche	Loss Coverage		Expected Ratings	Balance		To Call*		Maturity*	
						WAL	Principal Window	WAL	Principal Window
	Attach	Detach		STACR	ACIS				
M-1A	340	475	Investment Grade	\$576m	\$90m	1.25	1 – 31	1.25	1 – 31
M-1B	175	340	Investment Grade	\$597m	\$90m	4.21	31 – 60	4.47	31 – 79
M-2	130	175	Rated	\$287m	\$69m	5.04	60 – 60	8.22	79 – 120
B-1	75	130	Rated/Not Rated	\$351m	\$45m	5.04	60 – 60	11.64	120 – 162
B-2	25	75	Rated/Not Rated	\$319m	\$20m	5.04	60 – 60	16.27	162 – 239
<b>Total</b>				<b>\$1,919m</b>	<b>\$314m</b>	*Assume stated CPR & 0 CDR; WAL in years, principal window in months			

	STACR	ACIS
<b>Maturity</b>	20 Year	12.5 Year
<b>Early Termination</b>	Earlier of: (a) 10% or less pool factor or (b) on or after 60th payment date	Earlier of: (a) 10% or less pool factor or (b) on or after 60th payment date
<b>Qualified Buyer</b>	Qualified Institutional Buyer "QIB"	Approved Counterparty
<b>Coupon/Premium</b>	30-day Average SOFR plus spread (post 10/2020)	Fixed rate
<b>Liquidity</b>	10-12 broker/dealers make active markets daily	(Re)insurer posts collateral for a portion of risk insured; buy and hold position with the ability to seek further reinsurance from a third party; interest paid based on notional amount
<b>Performance Triggers</b>	<ul style="list-style-type: none"> <li>Minimum Credit Enhancement Test</li> <li>Delinquency Test</li> <li>Cumulative Net Loss Test</li> </ul>	Same as STACR
<b>Other</b>	<ul style="list-style-type: none"> <li>144A Compliant</li> <li>Minimum Denomination \$10,000</li> <li>Minimum Increment \$1</li> </ul>	N/A


Note: For illustrative purposes only

## Allocation of Loss Due to Credit Event

<div><div></div><div></div><div></div><div></div><div></div><div></div><div></div></div>	1.	Class B-3 Principal	Disposition Loss =	1	(+)	UPB at time of removal from the Reference Pool (including prior principal forgiveness)
	2.	Class B-2 Principal		2	(-)	Net Sales Proceeds
	3.	Class B-1 Principal		3	(+)	Delinquent Accrued Interest (Non-Capitalized)
	4.	Class M-2 Principal		4	(+)	Taxes and Insurance
	5.	Class M-1B Principal		5	(+)	Legal Costs
	6.	Class M-1A Principal		6	(+)	Maintenance and Preservation Costs (e.g. Property Inspection, HOA, Utilities, Rental Receipts, REO Management, etc.)
	7.	Class A Principal		7	(-)	MI Proceeds (Total Claim Amount * Coverage %)
				8	(+)	Miscellaneous Expenses (e.g. BPO, other sales expenses not included in item 2 above)
				9	(-)	Miscellaneous Credits (e.g. Positive Escrow, Insurance Refunds, Hazard Claim Proceeds, Make Whole Events, etc.)

**Note:** For illustrative purposes only.

## Allocation of Modification Loss



1.	Class B-3 Principal
2.	Class B-2 Interest
3.	Class B-2 Principal
4.	Class B-1 Interest
5.	Class B-1 Principal
6.	Class M-2 Interest
7.	Class M-2 Principal
8.	Class M-1B Interest
9.	Class M-1B Principal
10.	Class M-1A Interest
11.	Class M-1A Principal

Modification Hierarchy	Investor Impact	Borrower Impact
Term Extension	No Impact	Loan term is extended to reduce borrower monthly payments
Interest Rate Reduction	Loss of interest from rate change	Reduces monthly payment
Principal Forbearance	Loss of interest from non-interest bearing amount	Suspension of mortgage payments for a specific period of time which is paid as a balloon payment upon termination of the loan
Modification Loss =	1	(+) Modification Costs e.g. Interest Short Fall (Passed to investors on a monthly basis included in modification loss amount)
	2	(+) Bankruptcy Cramdown Costs (Passed to investors at time of cramdown included in write down loss amount)

**Note:** For illustrative purposes only.



STACR and ACIS

## 2. Investors and Liquidity

# Investor Participation at Issuance

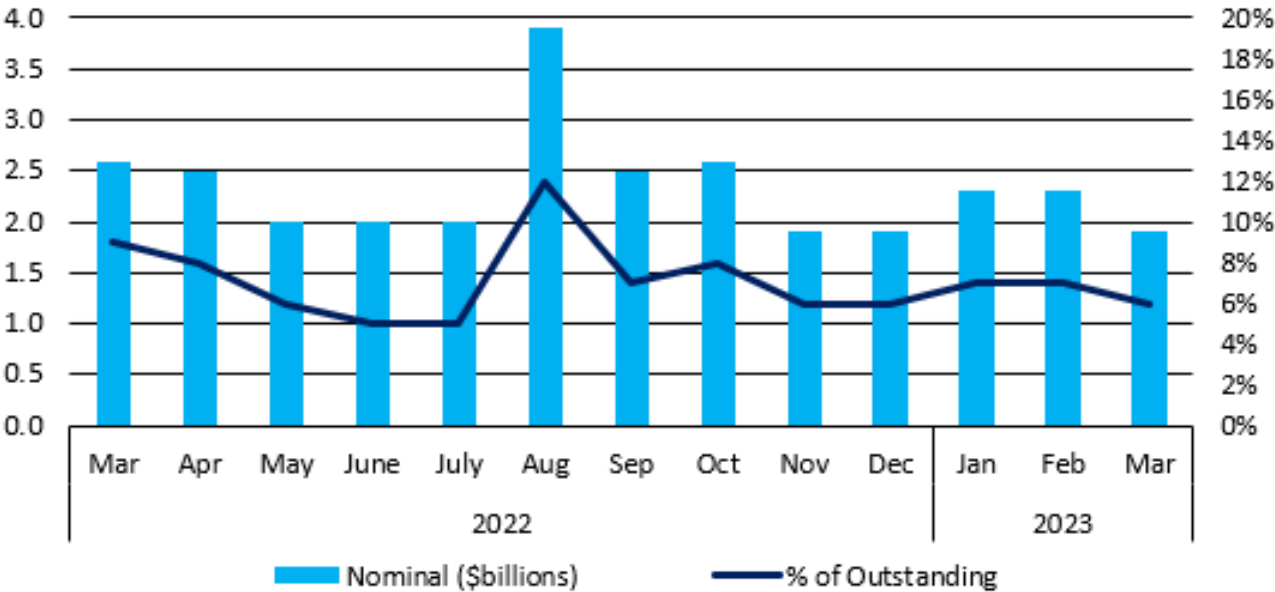
Now Available on Clarity: [Investor Participation Data](#)



Source: Freddie Mac, as of March 2023. Note: In addition to the participation shown above, ACIS is generally responsible for 25% of each tranche issued for (Re)insurer participation.

# STACR Trading Volume

Monthly Trading Volume Over Trailing 12 Months



Average Trading Volume per Month

	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Nominal (\$Billions)	0.3	0.6	1.1	1.5	1.9	1.7	2.0	2.4	2.2	2.4	2.2
% of Outstanding	48%	20%	13%	11%	12%	8%	8%	9%	7%	7%	7%

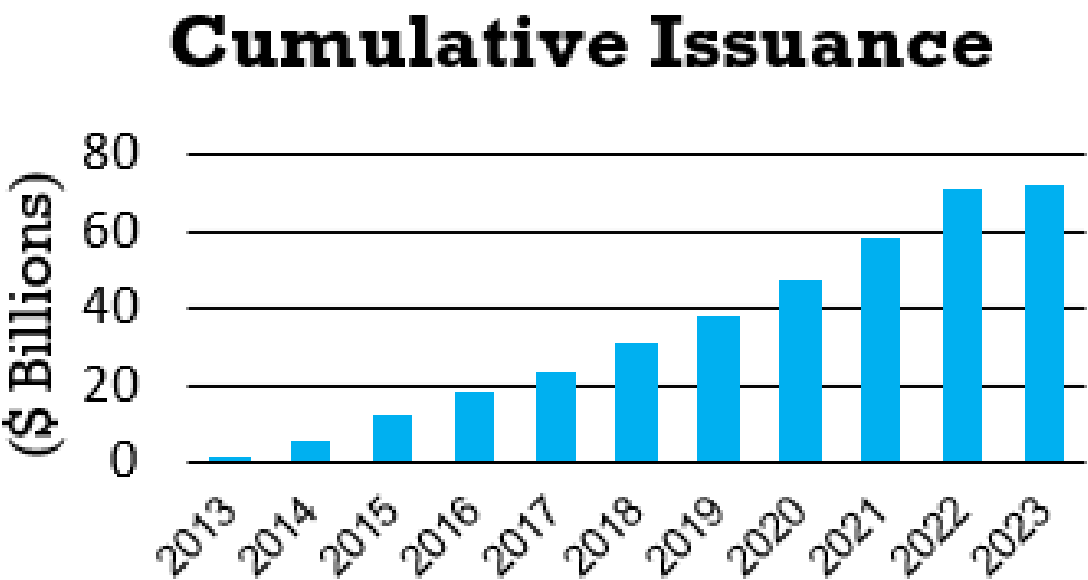
Source: Freddie Mac, as of March 2023. Note: Trading volumes reflect the sum of all buy and sell trades.



# STACR Issuance and Ratings

Cumulative Issuance (\$billions)	
Cumulative Issuance	\$71.5B
Deals	81

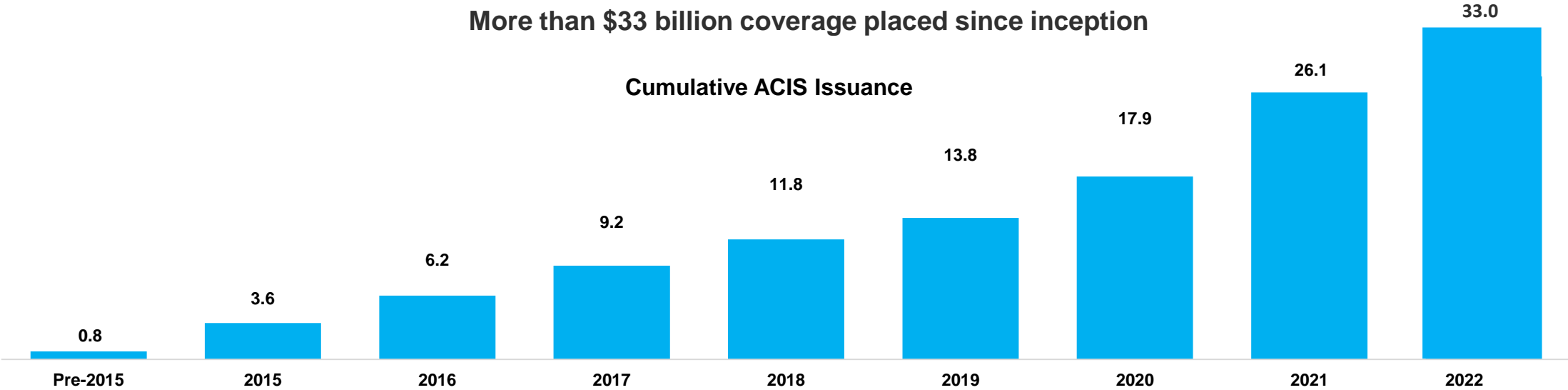
Current Outstanding (\$billions)	
Rated	23.8
Unrated	10.5
Total	34.3



Source: Freddie Mac and Bloomberg, as of March 2023.

## Flagship CRT offering and portfolio management tool

More than \$33 billion coverage placed since inception



Pre 2016	2016-2019	2020	2021	2022
<ul style="list-style-type: none"><li>▪ Pioneered first reinsurance transactions in GSE CRT market</li><li>▪ Developed key relationships with global reinsurers, brokers, and service providers</li><li>▪ Created an insurance Cell structure</li></ul>	<ul style="list-style-type: none"><li>▪ Diversified reinsurer panel</li><li>▪ Launched ACIS Standalone (SAP), ACIS Forward (AFRM), ARMR series (HARP), and sold seasoned B2 risk (FTR)</li><li>▪ Introduced 5-year call option</li></ul>	<ul style="list-style-type: none"><li>▪ Priced ACIS 2020-AFRM1 in June 2020, restarting CRT issuances since the onset of COVID-19 pandemic</li><li>▪ 60+ Transactions in 8 years</li></ul>	<ul style="list-style-type: none"><li>▪ ACIS issued \$8.2B of limit, making it the highest issuance year since program inception</li><li>▪ 2021 SAP7 was the largest ACIS deal in program history at \$1.16B</li><li>▪ 30 reinsurers returned with 4 new accounts joining the program</li></ul>	<ul style="list-style-type: none"><li>▪ Launched 2 new ACIS offerings: Cash-Out Refinances (COR) and One-Month Forward (AFH)</li><li>▪ ACIS issued \$2.6B of limit in Q2, making it the highest issuance quarter since program inception</li><li>▪ 90+ Transactions in 10 years</li></ul>

Source: Freddie Mac, as of April 2023.

# STACR NAIC Price Breakpoints & Designations



- 114 STACR REMIC trust notes have NAIC designations.
- 38 STACR trust notes have NAIC designations.
- 53 STACR debt notes, 4 STACR HRP notes, and 3 STACR SPI notes have NAIC designations.

**Source:** NAIC.

**Note:** The National Association of Insurance Commissioners 2022 Mortgage Reference Securities Report is not a market substitute for or functional equivalent of the credit ratings of rating agencies and is not produced to permit investors to compare the likelihood of default or of full and timely payment between one or more securities.

Complete listing of NAIC Designations as of yearend 2022 for STACR transactions.

[NAIC Price Breakpoints and Designations - STACR REMIC Trust/STACR Trust and STACR Debt](#)

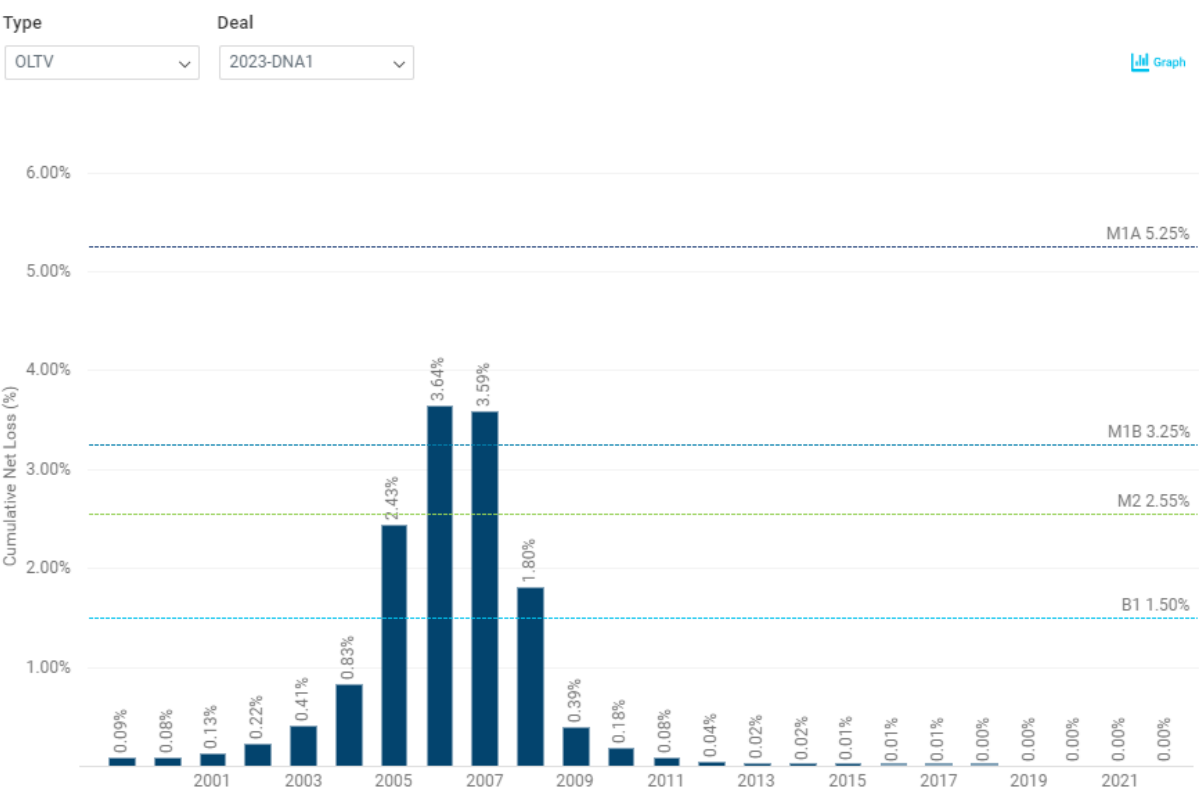


STACR and ACIS

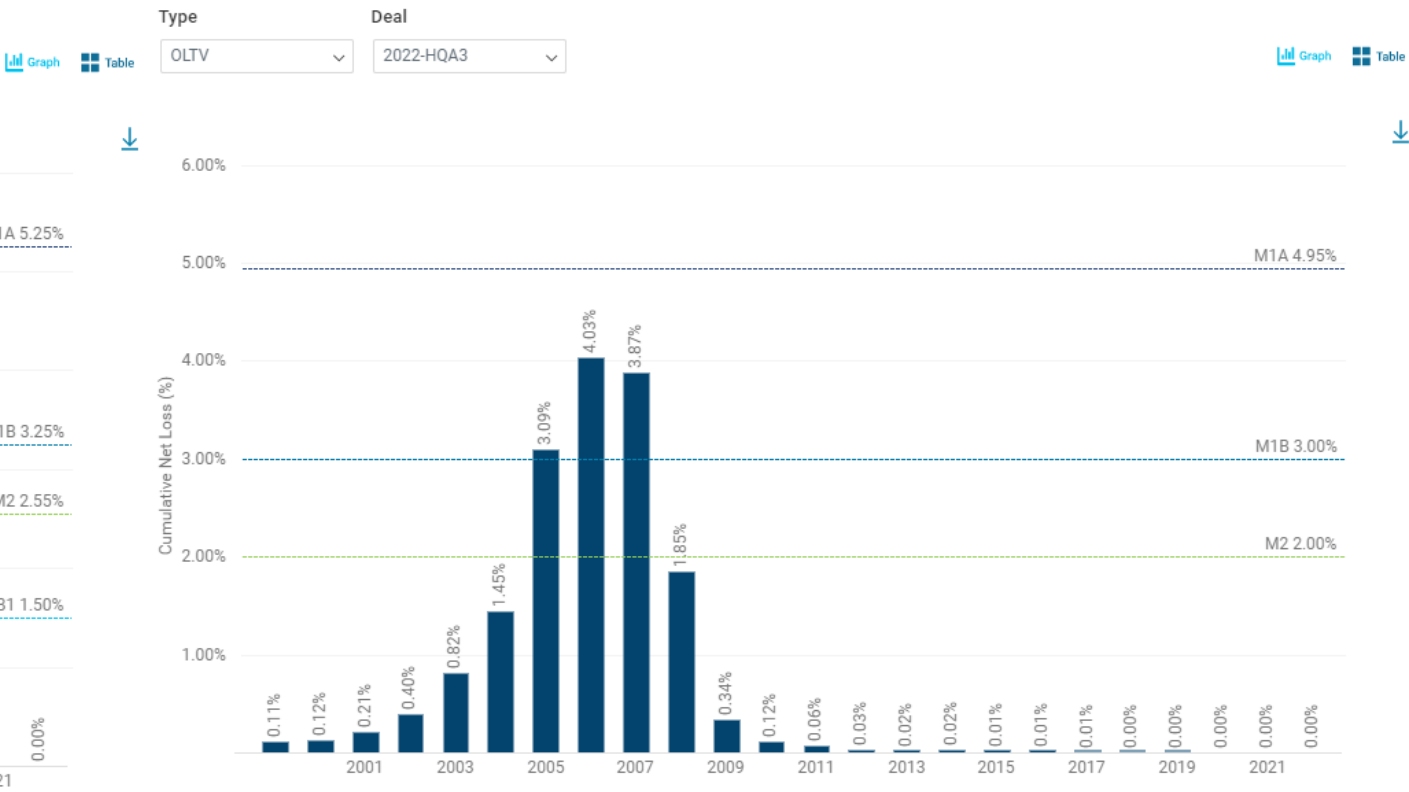
## 3. Portfolio Trends and CRT Performance

Access  
Clarity

## Low LTV Series



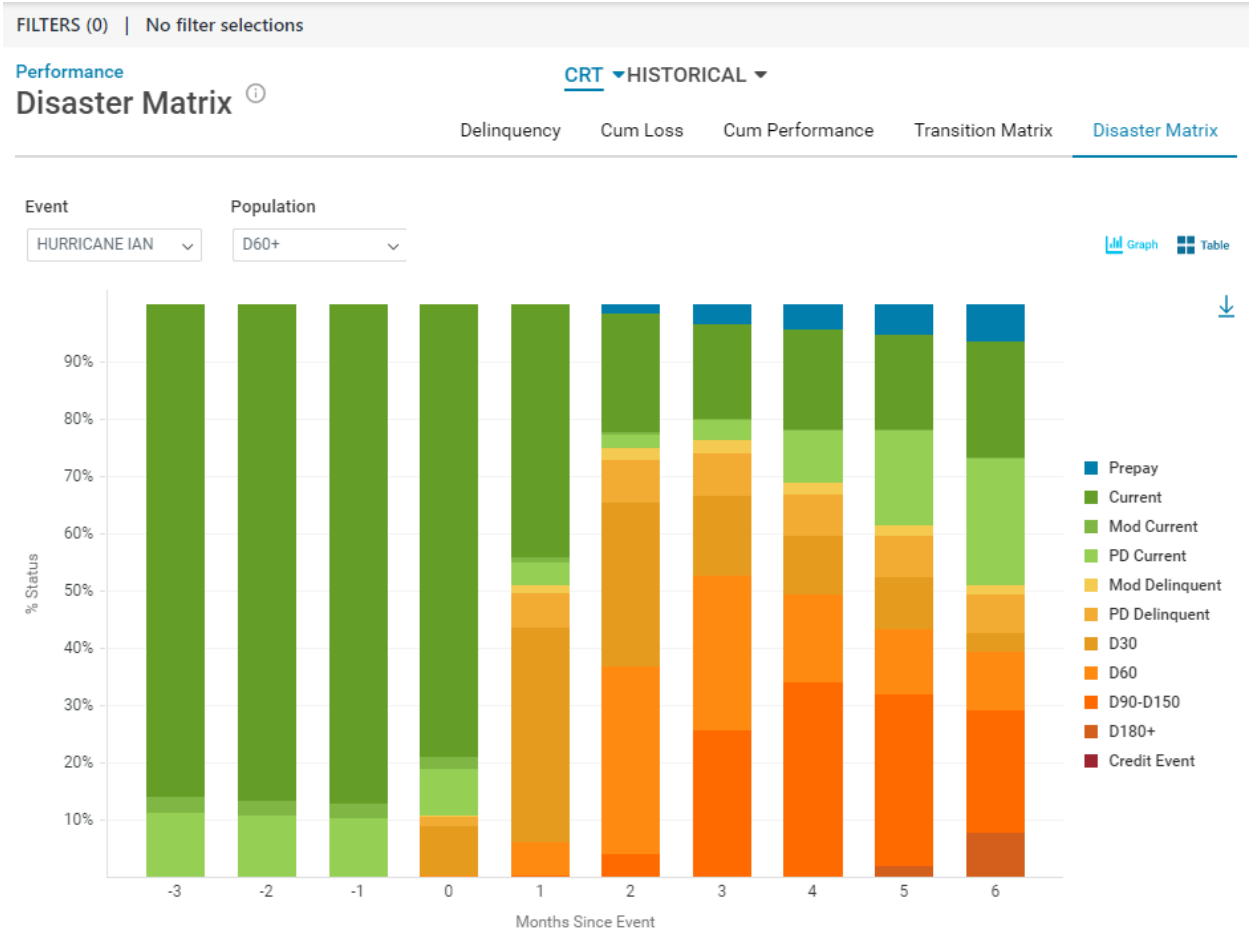
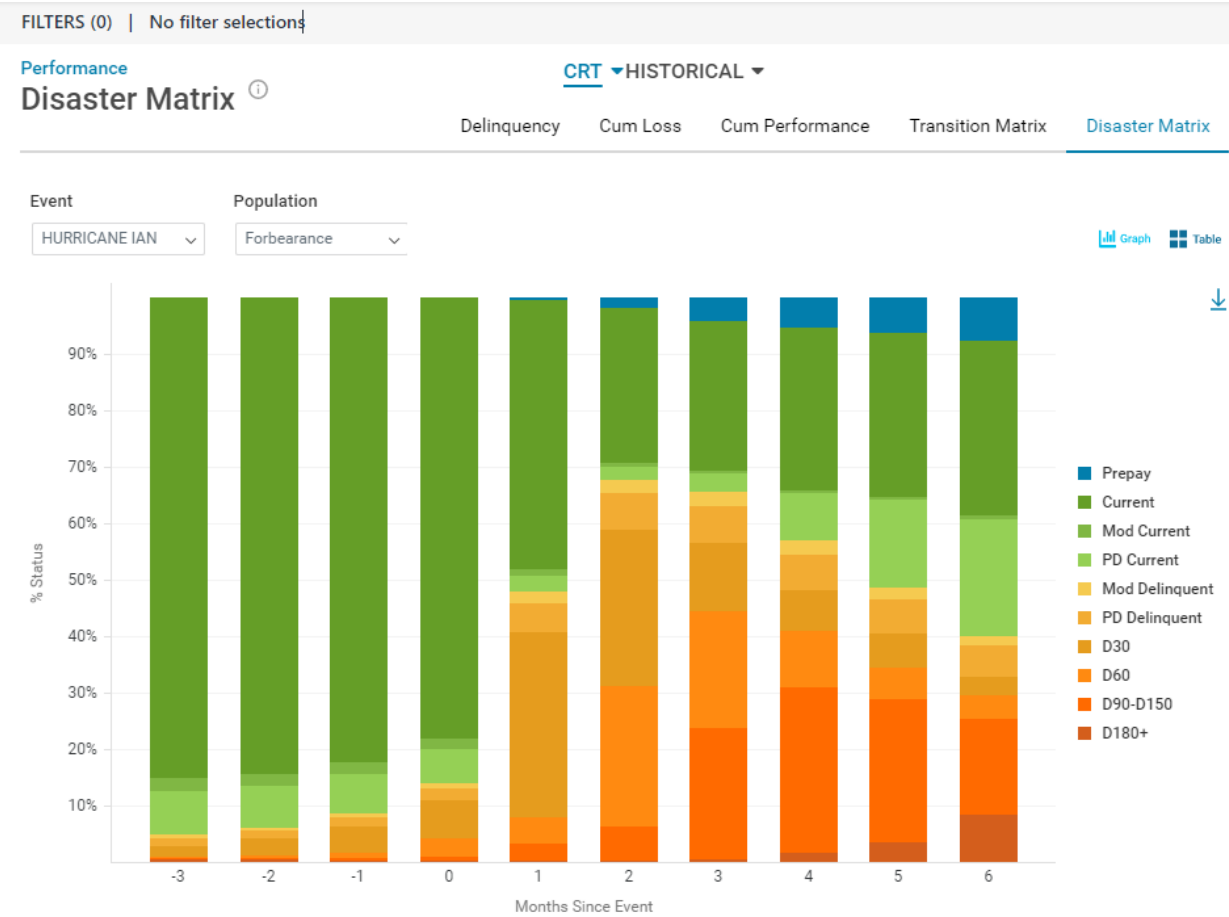
## High LTV Series



**Source:** Freddie Mac Clarity Proxy Cohort, as of April 2023. *For illustrative purposes only.*  
**Notes:** Data included in the tables above are derived from the most recent release of Freddie Mac's Single-Family Loan Level Dataset (SF LLD). Historical losses are weighted in proportion to the applicable deal's cohorts of FICO and either OLV or ELTV. Cumulative losses do not include modification losses. For more information, please reference the SF LLD [website](#).  
\* Specified class takes 100% loss, assuming no principal payments.

# Disaster Matrix Examples

Access  
Clarity



Source: Freddie Mac Clarity Disaster Matrix, as of April 2023. For illustrative purposes only.

# Collateral Profile: Low LTV Series



Access  
Clarity

Deal	OLTV	ELTV	FICO	DTI	Investor %	DTI>45 %	FICO<680 %	Home Possible %	ACE %	Forbearance %
2023-DNA1	75	77	749	37	9.6%	19.6%	8.4%	0.7%	20.7%	0.0%
2022-DNA7	74	70	740	36	10.6%	13.7%	11.9%	0.7%	21.5%	0.3%
2022-DNA6	74	69	745	36	9.0%	13.8%	9.6%	0.6%	26.8%	0.3%
2022-DNA5	74	68	746	36	8.2%	13.0%	9.2%	0.5%	35.2%	0.4%
2022-DNA4	74	67	747	35	6.3%	12.5%	8.8%	0.5%	37.6%	0.4%
Average	75	70	745	36	8.7%	14.5%	9.6%	0.6%	28.3%	0.3%

Source: Freddie Mac Clarity/ Origination/ Characteristics, as of April 2023. More data fields available in Clarity. Note: Amounts shown are current.

# Collateral Profile: High LTV Series



Access  
Clarity

Deal	OLTV	ELTV	FICO	DTI	Investor %	DTI>45 %	FICO<680 %	Home Possible %	ACE %	Forbearance %
2022-HQA3	92	82	750	36	0.3%	10.2%	4.5%	8.1%	1.9%	0.4%
2022-HQA2	92	81	749	36	0.3%	9.8%	4.5%	8.3%	2.2%	0.5%
2022-HQA1	92	79	751	35	0.1%	8.7%	3.9%	8.1%	3.3%	0.5%
Average	92	81	750	36	0.3%	9.6%	4.3%	8.2%	2.5%	0.5%

Source: Freddie Mac Clarity/ Origination/ Characteristics, as of April 2023. More data fields available in Clarity. Note: Amounts shown are current.



# Cumulative Net Loss by Series

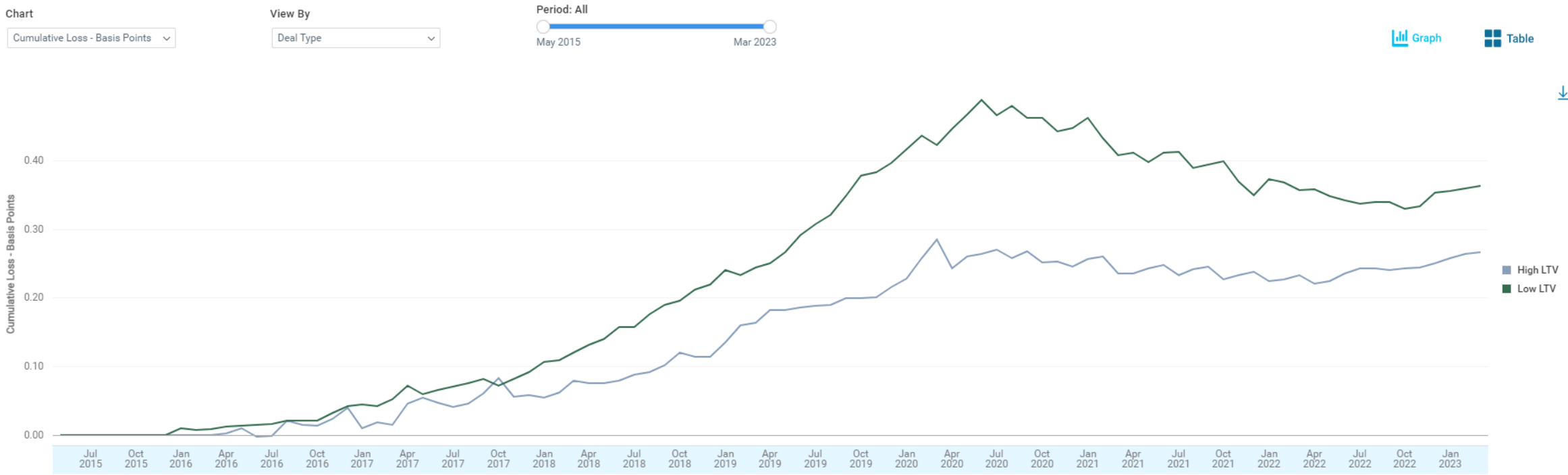
Access  
Clarity

FILTERS (3) | Deal Type (High LTV, Low LTV) Loss Type (Actual Loss) Offering (STACR) [View all](#)

Charts CRT HISTORICAL

Credit Event ⓘ

Delinquency Loss Mitigation Credit Event



DNA Weighted Average Cumulative Loss bps: 0.36

HQA Weighted Average Cumulative Loss bps: 0.27

Source: Freddie Mac Clarity/ Charts/ Credit Event, as of March 2023. For illustrative purposes only.

# Transition Matrix by Series

Access  
Clarity

## Low LTV Series, Actual Loss

Freddie Mac

Clarity Data Intelligence®

Loan Level Download

Help

Log Out

FILTERS (2) | Deal Type (Low LTV) Loss Type (Actual Loss)

View all

Performance

Transition Matrix

CRT

HISTORICAL

Delinquency

Cum Loss

Cum Performance

Transition Matrix

Disaster Matrix

View

Loan Status

Values

% Prior UPB

Prior Period

1 month

As of

Apr 2023

Prior Loan Status	Current Loan Status							Pool Removal				Total
	Current	D30	D60	D90	D120	D150	D180+	REO	Credit Event	Defect	Prepaid	
Current	99.36%	0.29%	0.00%	0.00%	0.00%		0.00%			0.00%	0.34%	100.00%
D30	60.88%	27.64%	10.60%	0.04%	0.01%					0.02%	0.81%	100.00%
D60	20.97%	14.03%	24.01%	39.52%	0.20%	0.04%	0.01%			0.04%	1.18%	100.00%
D90	14.79%	3.59%	6.39%	13.06%	60.61%	0.18%	0.08%				1.31%	100.00%
D120	11.99%	1.13%	1.20%	2.41%	11.74%	70.30%	0.14%			0.06%	1.04%	100.00%
D150	14.41%	1.00%	0.41%	0.70%	1.82%	13.39%	66.83%	0.00%		0.18%	1.25%	100.00%
D180+	13.13%	1.10%	0.36%	0.23%	0.16%	0.38%	82.75%	0.11%	0.15%	0.26%	1.37%	100.00%

Source: Freddie Mac Clarity/ Performance/ Transition Matrix, as of April 2023. For illustrative purposes only.

## High LTV Series, Actual Loss

Freddie Mac

Clarity Data Intelligence®

Loan Level Download

Help

Log Out

FILTERS (2) | Deal Type (High LTV) Loss Type (Actual Loss)

View all

Performance

Transition Matrix

CRT

HISTORICAL

Delinquency

Cum Loss

Cum Performance

Transition Matrix

Disaster Matrix

View

Loan Status

Values

% Prior UPB

Prior Period

1 month

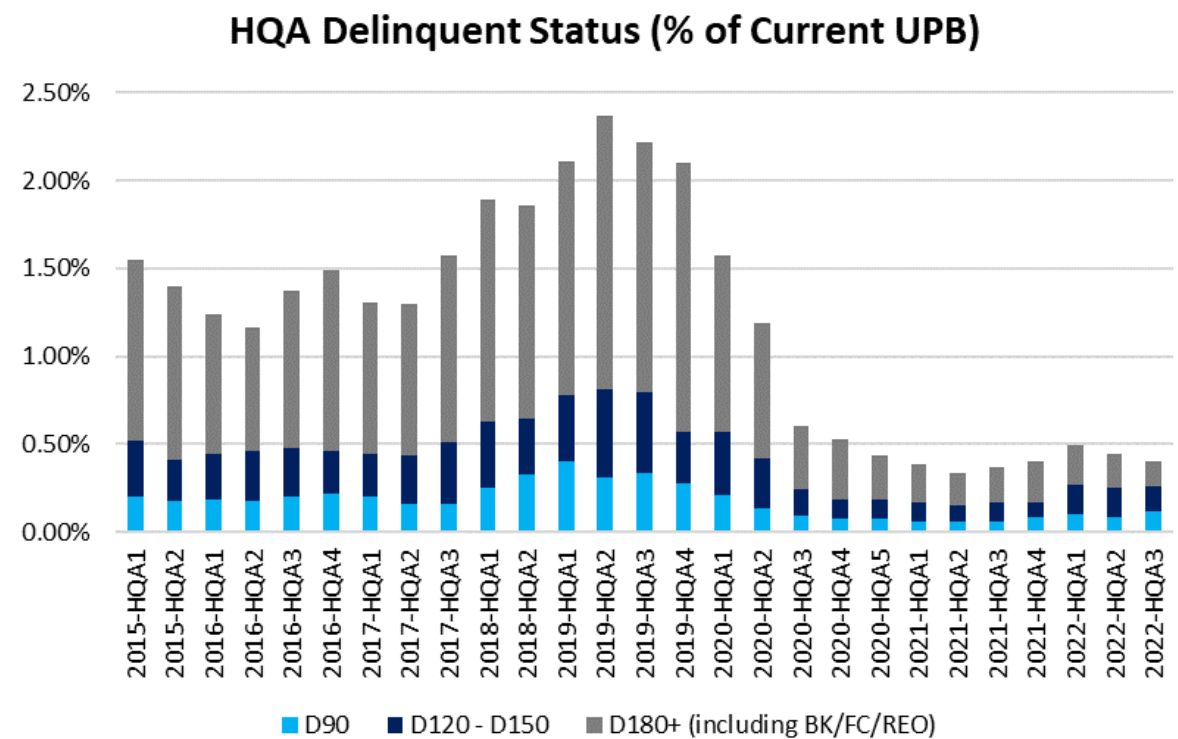
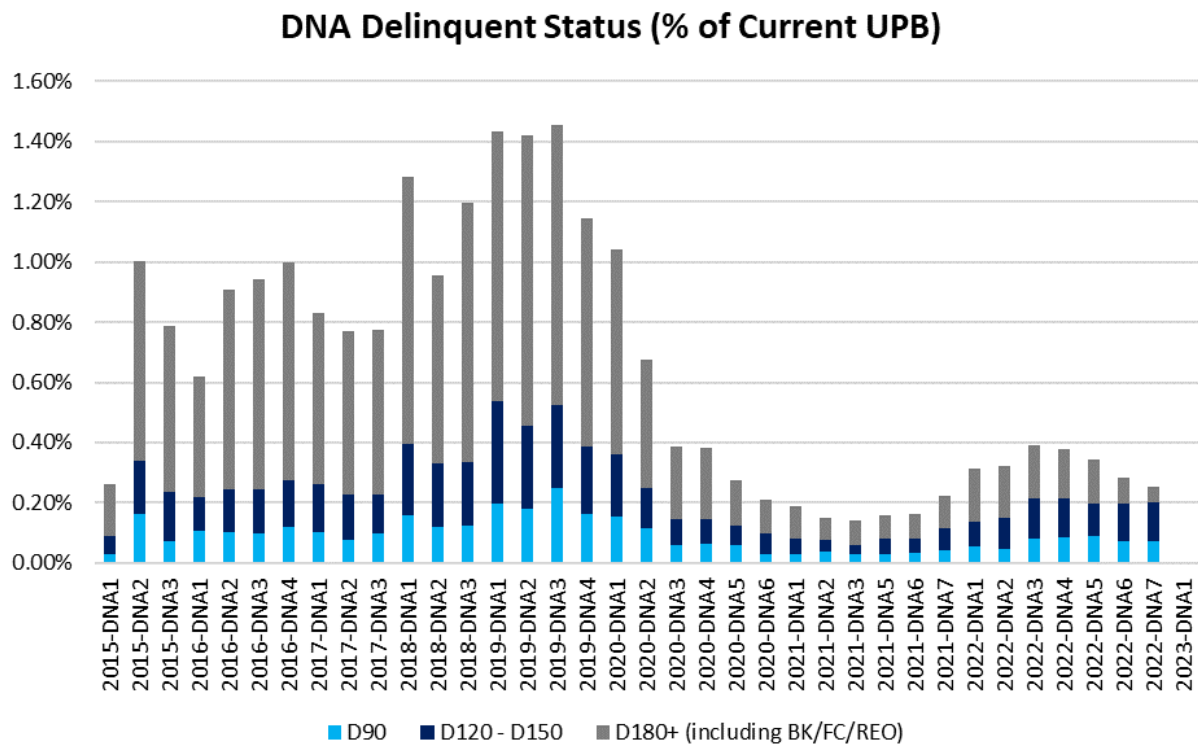
As of

Apr 2023

Prior Loan Status	Current Loan Status							Pool Removal				Total
	Current	D30	D60	D90	D120	D150	D180+	REO	Credit Event	Defect	Prepaid	
Current	99.29%	0.33%	0.00%	0.00%	0.00%		0.00%			0.01%	0.37%	100.00%
D30	52.84%	32.26%	13.86%	0.07%	0.01%	0.00%				0.04%	0.92%	100.00%
D60	17.97%	14.13%	26.35%	40.16%	0.13%	0.02%	0.03%			0.07%	1.14%	100.00%
D90	12.97%	4.00%	6.60%	13.71%	61.11%	0.20%	0.03%			0.05%	1.33%	100.00%
D120	9.86%	0.65%	1.04%	2.86%	13.97%	70.09%	0.17%		0.08%	0.16%	1.11%	100.00%
D150	15.12%	0.69%	0.74%	0.70%	1.42%	13.03%	66.93%			0.21%	1.16%	100.00%
D180+	11.79%	0.77%	0.33%	0.14%	0.12%	0.40%	84.40%	0.32%	0.12%	0.23%	1.38%	100.00%

# Serious Delinquency (D90+) by Series

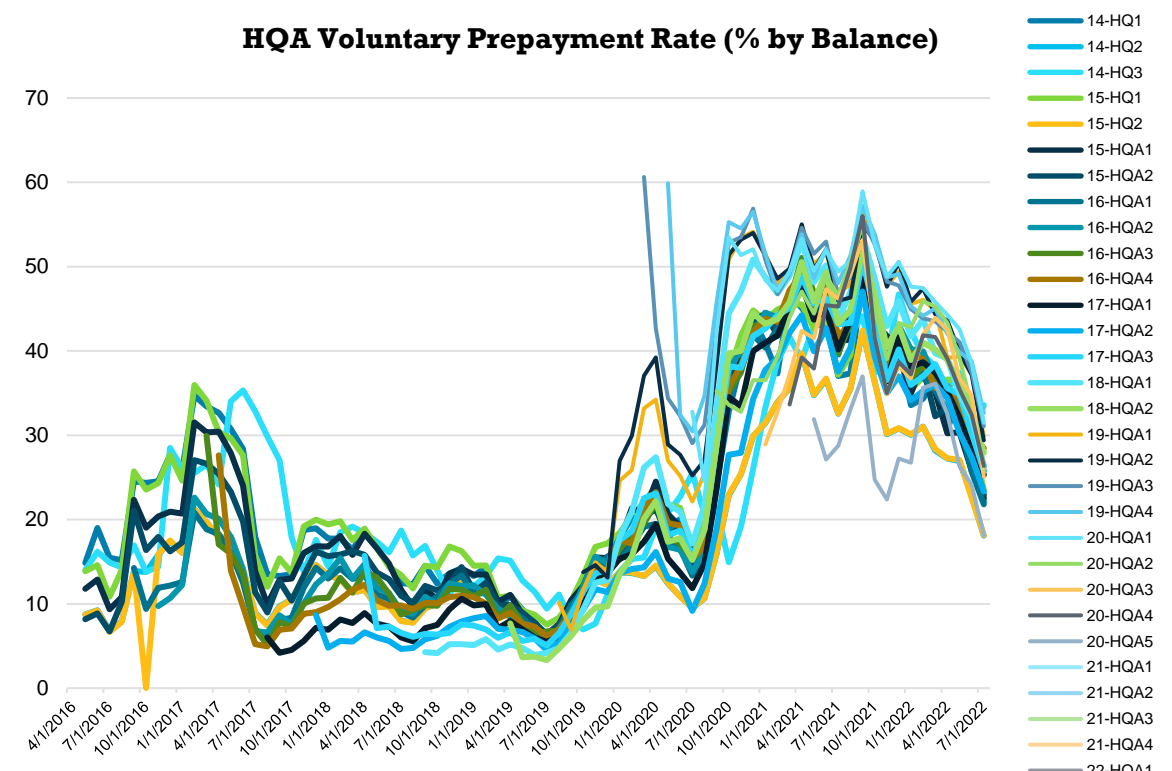
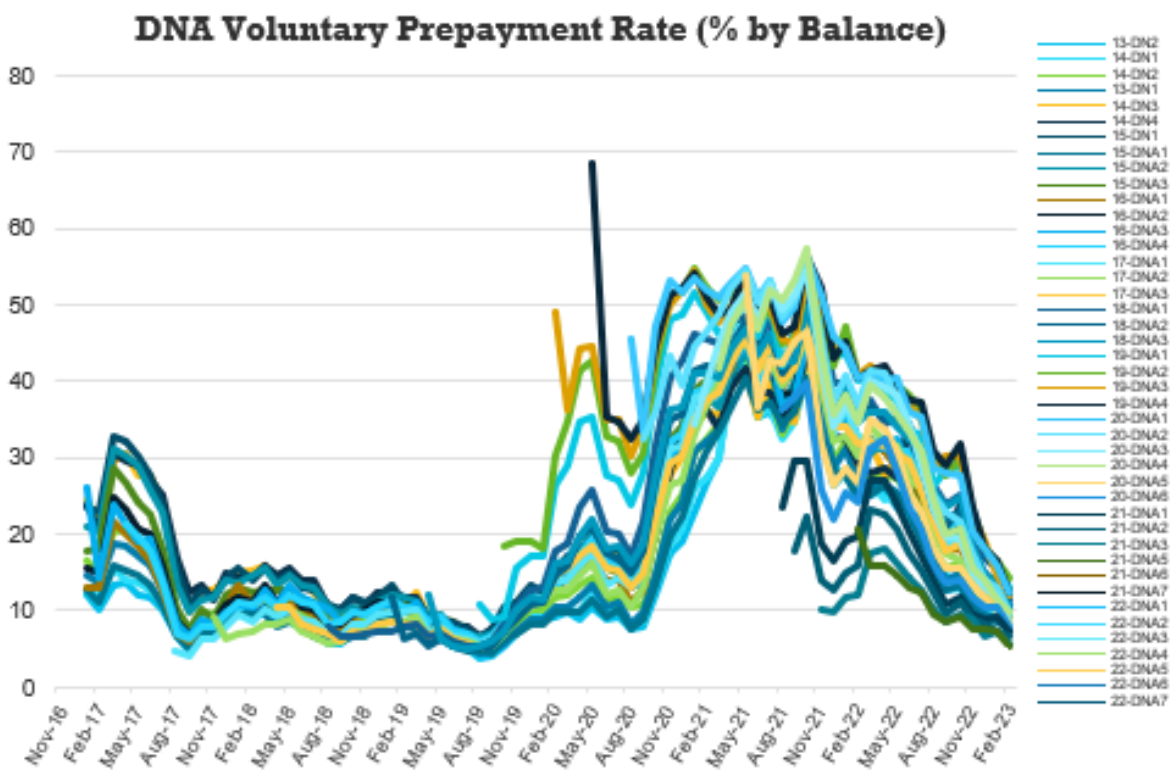
Access  
Clarity



Source: Freddie Mac Clarity/ Performance/ Delinquency, as of April 2023. Stacked column charts created using D90, D120, D150, D180+ and REO data segments.

# Voluntary Prepayment Rates by Series

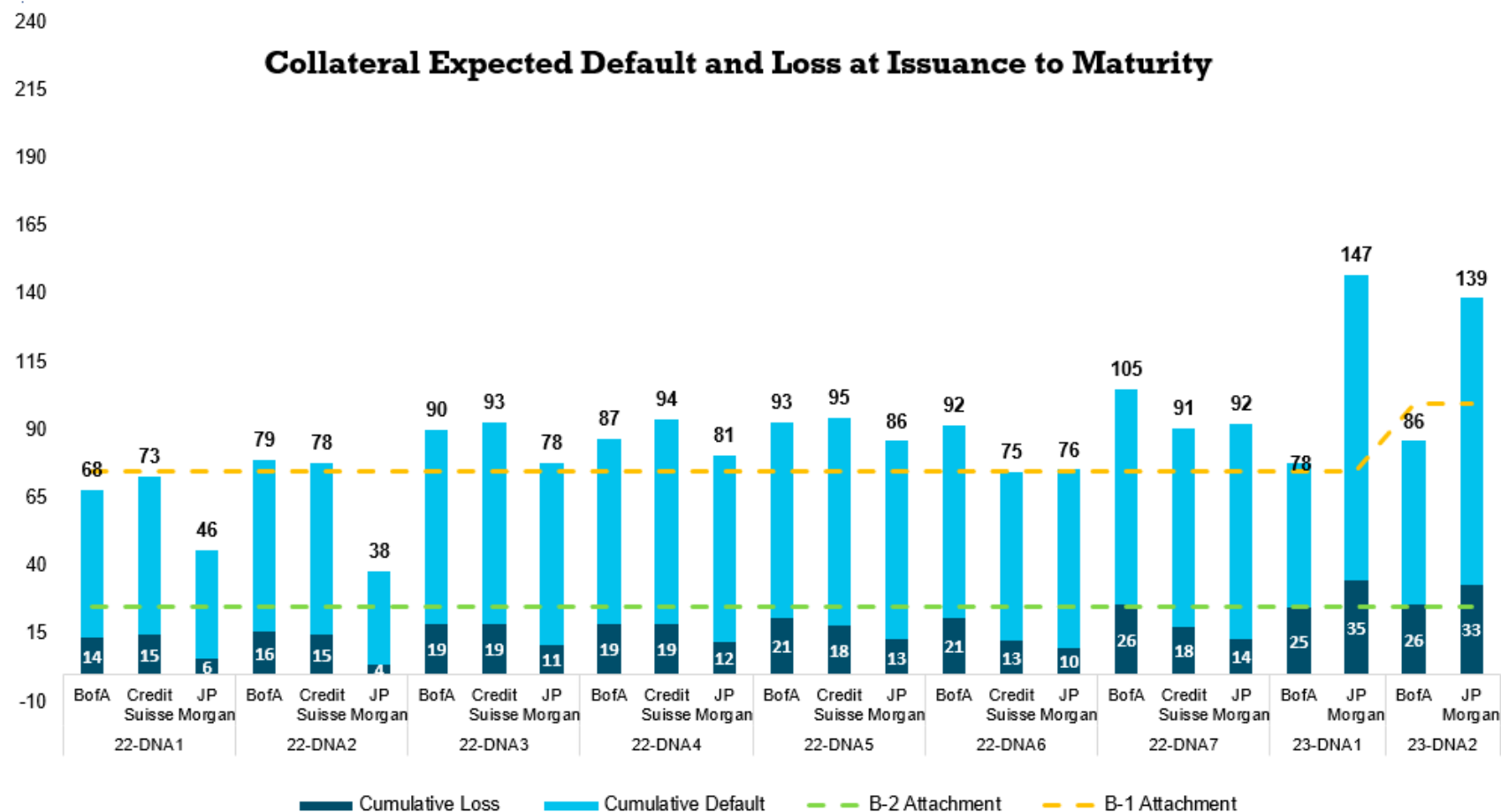
Access  
Clarity



Source: Freddie Mac monthly remittance data, as of March 2023.

Source: Freddie Mac monthly remittance data, as of August 2022.

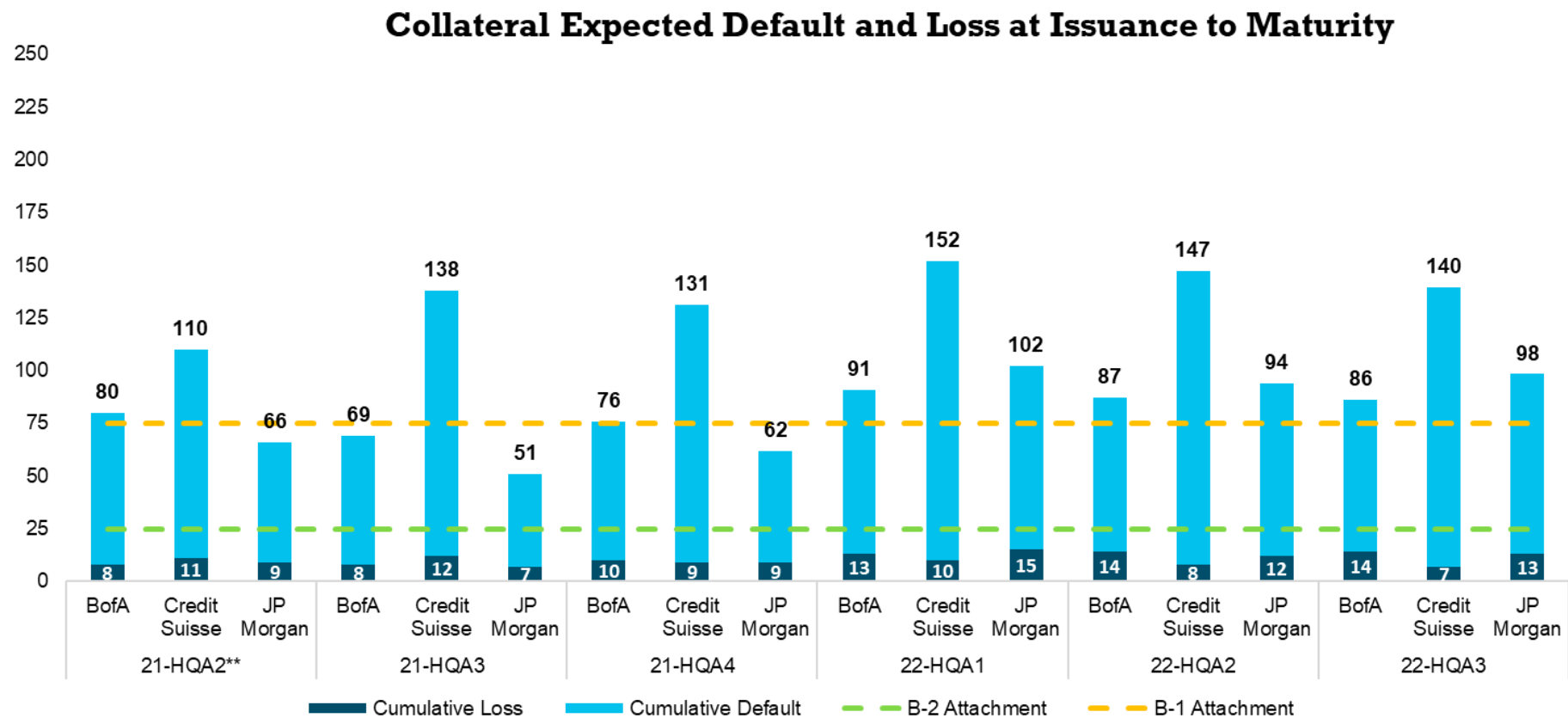
# DNA Third-Party Base Expected Default and Loss



Disclaimer: The estimates shown above are for informational purposes only and delivered solely as reference material with respect to Freddie Mac. There is no assurance that the actual losses of the Reference Obligations will mirror the estimates shown above. The information contained in these materials may be based on assumptions regarding market conditions and other matters that may be of a proprietary nature to the model owners and unknown to Freddie Mac. The model owners have consented to Freddie Mac's use and presentation of the estimates shown here, but do not make any representations that the information is accurate or complete. Neither Freddie Mac, nor the model owners, take responsibility for or make representations regarding the reasonableness of the underlying assumptions that form the basis of the estimates shown here or the likelihood that the estimates shown will coincide with actual market conditions or events and the estimates should not be relied upon for such purposes.

\*Values indicated are based on a 20-year term to maturity; other deal values indicated are based on a 12.5year term to maturity

# HQA Third-Party Base Expected Default and Loss



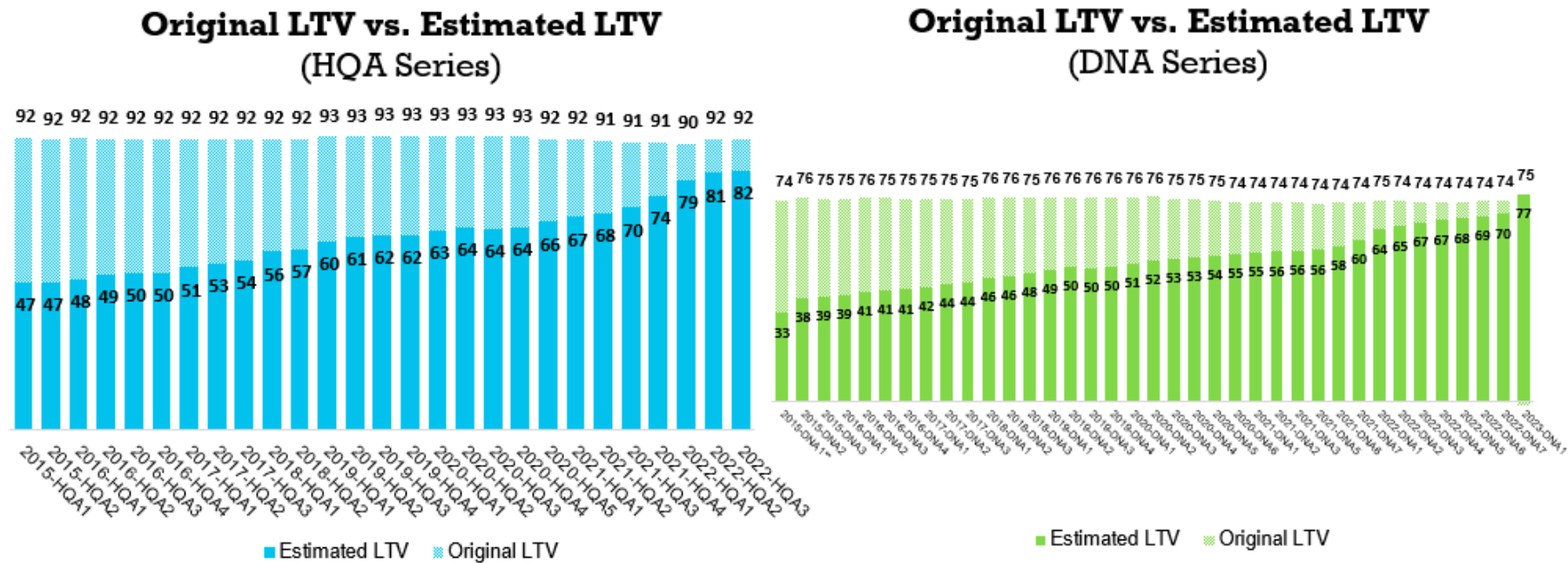
Disclaimer: The estimates shown above are for informational purposes only and delivered solely as reference material with respect to Freddie Mac. There is no assurance that the actual losses of the Reference Obligations will mirror the estimates shown above. The information contained in these materials may be based on assumptions regarding market conditions and other matters that may be of a proprietary nature to the model owners and unknown to Freddie Mac. The model owners have consented to Freddie Mac's use and presentation of the estimates shown here, but do not make any representations that the information is accurate or complete. Neither Freddie Mac, nor the model owners, take responsibility for or make representations regarding the reasonableness of the underlying assumptions that form the basis of the estimates shown here or the likelihood that the estimates shown will coincide with actual market conditions or events and the estimates should not be relied upon for such purposes.

\*Values indicated are based on a 30-year term to maturity; \*\*Values indicated are based on a 12.5-year term to maturity; other deal values indicated are based on a 20-year term to maturity

# Estimated LTV Numbers

Ongoing positive house price appreciation allows borrowers to build equity, thereby reducing loan-to-value ratio and credit risk.

- Home Value Explorer® (HVE®) is a Freddie Mac AVM tool that generates an estimate of property value
- HVE provides extensive coverage of all 50 states and more than 3,100 counties with its database of ~100 million property records
- For more information on HVE visit: [sf.freddiemac.com/tools-learning/home-value-suite/overview](https://sf.freddiemac.com/tools-learning/home-value-suite/overview)



Source: Freddie Mac, as of March 2023. \*\*Weighted average life was 28 months at issuance, typical transaction is between 9-12 months.



# Credit Risk Management Framework





Credit Risk Management Framework

# 1. Overview



## Freddie Mac – Risk Management

### Underwriting Standards

- Documentation Standards and Credit Eligibility Requirements
- Delegated Underwriting Guidelines
- Seller Representations and Warranties
- Freddie Mac Loan Advisor®

### Quality Control

- Post-Close Credit Review
- Quality Assurance
- Compliance Review
- Performing Loan and Non-Performing Loan Quality Control Review
- Due Diligence Review
- Underwriting Defects Repurchase Process

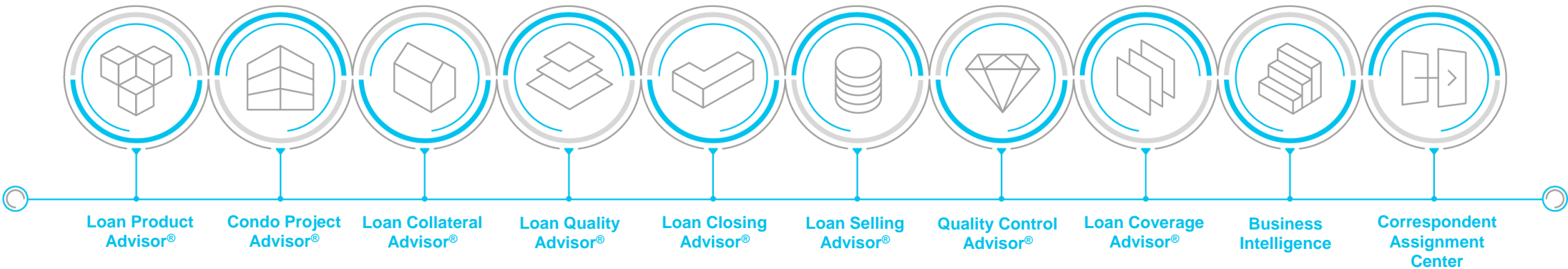
### Seller/Servicer Management

- Seller In-House Quality Control
- Seller Servicer Approval Standards
- Loan Servicer Performance Monitoring and Scorecard
- Counterparty Operational Risk Evaluation (CORE) Reviews

**CRT is supported by an advanced risk management framework**

## Loan Advisor

Freddie Mac Loan Advisor® is a smart, end-to-end technology solution built to provide greater certainty about the quality of loans and offer insight into loans' purchase eligibility early in the loan production process. Loan Advisor's advanced analytics and modeling capabilities automate processes, catch errors and identify opportunities to reduce risk.



Freddie Mac's goal is to have 100% of loans processed through Loan Product Advisor or Loan Quality Advisor\*

Loan Advisor is set up so the Exclusionary List is only accessible by approved Seller-Servicers

Loans sold to Freddie Mac must have documented evidence of the mortgagor's ability to repay and of the value of the property

Appraisal independence rules insulate the appraiser from influence by other parties involved in processing or originating the loan

Representations & Warranties require the Seller/Service to repurchase the loan if there is a material underwriting defect discovered, subject to certain limits

\*Does not include bulk deals



## Loan Product Advisor<sup>®</sup>

Loan Product Advisor (LPA<sup>SM</sup>) is the cornerstone of Loan Advisor. LPA takes advantage of proprietary data models and intelligent automation to promote loan compliance with Freddie Mac underwriting standards.



**Features innovative tools and offerings leveraging algorithms to enhance the origination process**

### **Home Value Explorer<sup>®</sup> (HVE)**

An automated Freddie Mac tool used to determine values of properties inside and outside of Freddie Mac.

### **Automated Collateral Evaluation (ACE)**

An offering that eliminates the need for a traditional appraisal for properties that have valuations validated by HVE.

### **Asset and Income Modeler (AIM)**




An Automated Underwriting System (AUS) solution used to verify borrower assets and income. AIM is the first and only AUS solution in the industry to also assess self-employed income.



**Generates an assessment of a loan's credit risk and overall quality**

- ✓ Minimum credit score requirements
- ✓ Maximum debt-to-income ratio limits
- ✓ Maximum loan-to-value ratio limits
- ✓ Elimination of risky products (IOs, pay option ARMs, no documentation and balloons)

Freddie Mac performs QC across all purchased loans, including those that are credit enhanced by any of the CRT programs. Losses are mitigated through a comprehensive QC program across performing and non-performing loans, including third-party QC processes by lenders.

	<b>Performing Loan QC</b>	<ul style="list-style-type: none"><li>▪ Regularly perform QC on a random and targeted basis to test the quality of recently purchased loans, including added focus on key elements of particular interest or concern (e.g., loan attributes or sellers).</li><li>▪ Freddie Mac benchmarks every loan we purchase against our valuation model and appraisals are assessed within our automated system, Loan Collateral Advisor® for instantaneous feedback to the originator.</li><li>▪ CRT transactions perform a separate Due Diligence review</li></ul>
	<b>Non-Performing Loan QC</b>	<ul style="list-style-type: none"><li>▪ Freddie Mac also reviews mortgage loans that default within the first few years after purchase or guarantee.</li></ul>
	<b>Seller In-House QC</b>	<ul style="list-style-type: none"><li>▪ Each loan seller must have an in-house QC program that has written procedures and operates independently of the sellers' origination and underwriting functions.</li><li>▪ Freddie Mac reviews, monitors, and provides feedback on sellers' QC and origination practices, including performing on-site reviews of its largest sellers.</li></ul>

Freddie Mac believes that a well-rounded view of servicing performance supports a broad and in-depth analysis of both performing and non-performing loans.



## Account Plans

- Focused on covered National, Regional and Community Servicers, Independent Mortgage Bankers, Specialty Servicers, Master Servicers and Subservicers.
- Sets goals and objectives, establishes agreed-upon action plans and milestones.



## File Reviews, Rewards and Remedies

- Identifies servicing performance gaps and trends, encourages and rewards quality servicing.
- Helps identify and resolve issues and provides consequences for poor data quality and servicing processes.



## Servicer Success Scorecard

- Covers Master, Interim, Sub and Consolidated servicing modes
- Performance evaluation specific to servicer segments (ranked groups), uses synthetics and ranks.
- Provides loan level data and analyses.
- **Freddie Mac Servicer Honors and Rewards Program (SHARP)<sup>SM</sup>** – enables eligible servicing clients to receive annual rewards based on completion of the Servicer Success Scorecard.



## Counterparty Operational Risk Evaluation (CORE)

- Identifies Single-Family counterparty operational risk issues and monitors remediation.
- Provides assessment of Counterparty's compliance with Guide requirements.
- Conducts on-site due diligence of Servicers' preparedness for large MSR transfers.
- Works closely with account managers and Single-Family Operations to ensure review scope addresses new/ emerging risks.



Credit Risk Management Framework

## 2. Loss Mitigation

# Loss Mitigation

Payment Relief Options

1. Forbearance

2. Reinstatement

3. Repayment Plan

4. Deferred Payment Alternatives

Loan Modification Options

5. Flex Modification

Liquidation Options

6. Applicable Credit Events

1.	<b>Forbearance</b>	Provides a temporary reduction or suspension of payments to give borrowers a specified period of time to improve their financial situation. No mod loss impact.
2.	<b>Reinstatement</b>	The most desirable resolution for a temporary hardship. Reinstatement is the act of restoring a delinquent Mortgage to current status.
3.	<b>Repayment Plan</b>	Gives the borrower a defined period of time to reinstate the Mortgage following a temporary hardship by paying normal regular payments plus an additional agreed upon amount in repayment of the Delinquency.
4.	<b>Payment Deferral*</b>	A relief option for borrowers who became delinquent due to a short-term hardship that has since been resolved. Past due payments are deferred (non-interest bearing) and will be due at maturity, payoff date, or upon transfer or sale of the Mortgaged Premises.
	<b>COVID-19 Payment Deferral*</b>	Leverages a similar concept to the Payment Deferral solution. An eligible borrower will be brought current by deferring delinquent amounts to create a non-interest bearing balance that will become due at the earlier of the Mortgage maturity date, payoff date, or upon transfer or sale of the Mortgaged Premises.
	<b>Disaster Payment Deferral*</b>	As with the Payment Deferral and the COVID-19 Payment Deferral, under the terms of a Disaster Payment Deferral an eligible Borrower will be brought current by deferring delinquent amounts to create a non-interest bearing balance that will become due at the earlier of the Mortgage maturity date, payoff date or upon transfer or sale of the Mortgaged Premises.
5.	<b>Flex Modification</b>	An affordable modification that provides significant payment relief to eligible borrowers, leverages requirements of the Freddie Mac Standard and Streamlined Modifications.
6.	<b>Applicable Credit Events</b>	Credit Events such as short sale, third party sale, deed-in-lieu, REO disposition





**Mission:** effectively manage Freddie Mac's credit losses in a way that maximizes financial recoveries and supports community stabilization.



## Credit Loss Management

Improve Collateral Values

Manage Expenses

Maximize Remedies



## Community Stabilization

Preserve, Maintain, & Repair

Price Homes At Fair Market Value

Nonprofit / Owner-Occupant Priority

# REO Business Model & Process

Freddie Mac utilizes an asset management firm to perform the core REO disposition activities using the firm’s vendor network.

## REO Core Process

Outsourced With  
Freddie Mac  
Oversight

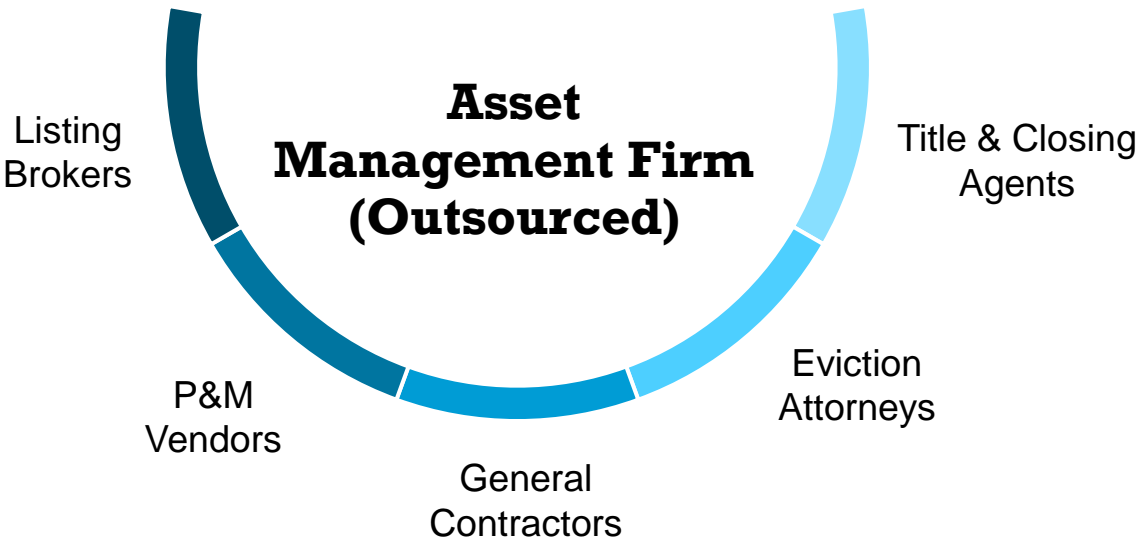
The outsourcer and their vendors are required to use Freddie Mac systems, follow detailed policies & procedures, and utilize proprietary methodologies for valuation, pricing, and repair decisioning.

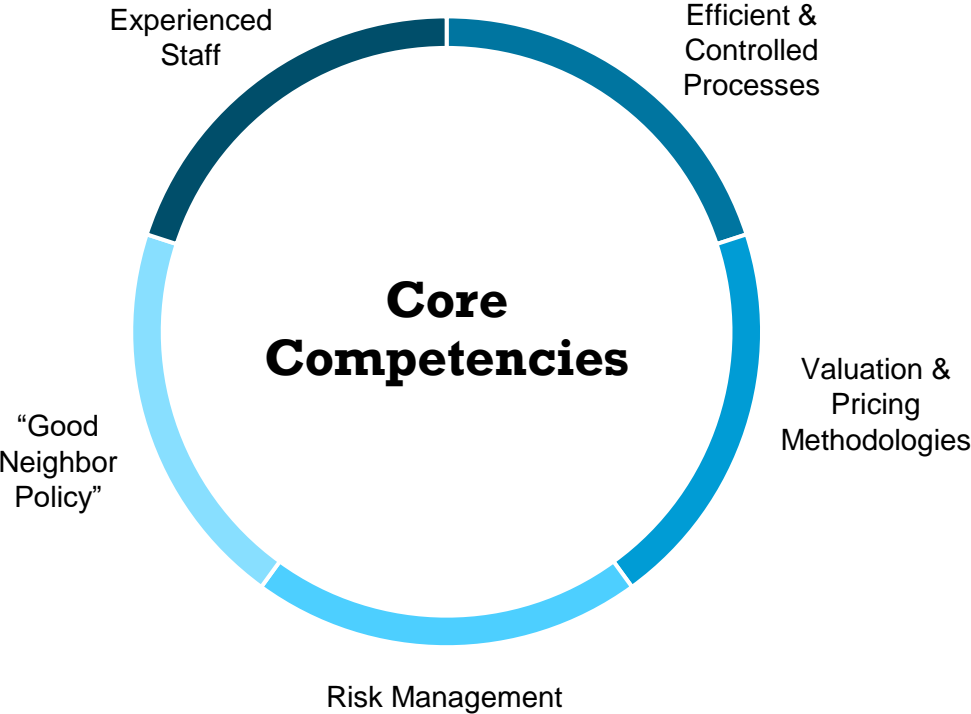
## REO Support & Financial Functions

Managed By  
Freddie Mac Staff

Freddie Mac staff perform oversight monitoring, support, and financial functions.

### Freddie Mac: Oversight | Support | Financial Functions





**Efficient & Controlled Processes**

Mature, efficient, and controlled disposition processes that helped us effectively manage our REO portfolio during the last financial crisis. Processes are continually refined as business and market conditions change.

**Valuation & Pricing Methodologies**

Extensive disposition data and analytics used to develop pricing models and disposition strategies to maximize collateral recoveries.

**Risk Management**

Proven financial, liability and reputation risk management practices.

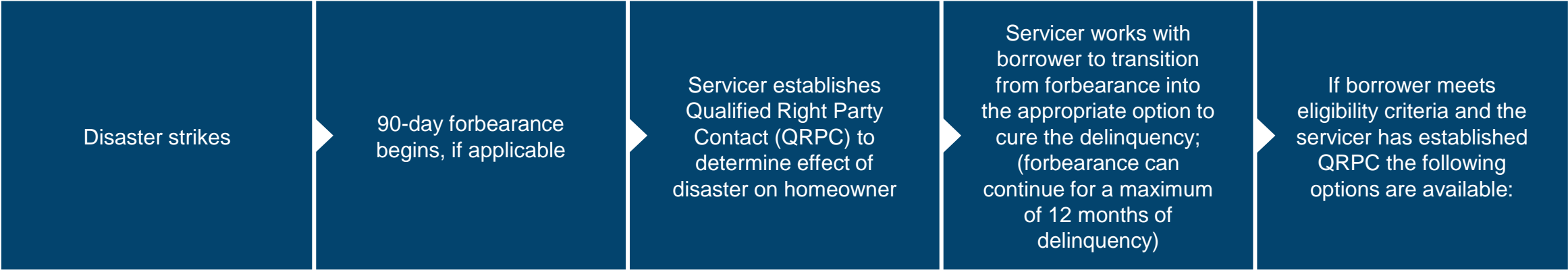
**“Good Neighbor Policy”**

REO homes are properly maintained and priced to protect communities. Nonprofit / Owner-Occupant exclusive purchase opportunities.

**Experienced Staff**

Experienced and tenured staff & management team.

# Servicing Disaster Relief Timeline



Disaster Solution	General Modifications
<b>Disaster Payment Deferral</b>	<b>Flex Modification</b>
An eligible Borrower who was current or less than 60 days delinquent at the time of the disaster will be brought current by deferring delinquent amounts to create a non-interest bearing balance that will become due at the earlier of the Mortgage maturity date, payoff date or upon transfer or sale of the Mortgaged Premises.	Targeting a payment reduction of 20% or greater
	Delinquencies (including advanced escrow) are capitalized
	Term is extended to 480 months
	May provide interest rate relief
<b>Only available for borrowers affected by disaster</b>	May result in principal forbearance

## Freddie Mac Disaster Policy goes into effect when:

A property located in a county, parish or municipality has been declared by the **President of the United States** to be a **Major Disaster Area** where federal aid in the form of **Individual Assistance** is being made available (Eligible Disaster Area\*).

Servicers must assist borrowers with Freddie Mac-owned mortgages who work or reside in the designated eligible disaster area\*

**Suspend Payments**  
for up to 12 months

**Waive Fees**  
for being late and assessment of new penalties during forbearance, trial, or repayment plan periods

**Disburse Insurance**  
proceeds

\*Disaster policy also goes into effect if damaged property is outside of FEMA area but has an insurable loss.

# Sustaining Homeownership During COVID-19 Workout Options – What Are They?



## Relief Options

**Reinstatement:** An option to catch up on all the missed payments at once in a single lump-sum payment.

**Repayment:** An option to spread out past due amount on the mortgage over a set time frame (e.g., 3, 6, 9 or up to 18 months) and added onto the existing mortgage payments.

**Payment Deferral:** An option to defer up to two monthly delinquent amounts to create a non-interest bearing balance that will become due at the earlier of the mortgage maturity date, payoff date, or upon transfer or sale of the mortgaged premises.

**COVID-19 Payment Deferral** (Effective July 1, 2020): An option to defer up to eighteen monthly delinquent amounts to create a non-interest bearing balance that will become due at the earlier of the mortgage maturity date, payoff date, or upon transfer or sale of the mortgaged premises. The hardship must be related to COVID-19.

## Modification Options

**Flex Modification:** An option for borrowers who can no longer afford their pre-forbearance payment. It adds unpaid balances from a forbearance period to an unpaid loan balance. The payment reduction is calculated depending on the LTV.

Visit the [COVID-19 Resources web page](#)



Credit Risk Management Framework

## 3. Freddie Mac Home Possible<sup>®</sup>



## Home Possible offers flexibility to meet a variety of borrower needs.

### Borrower Profile and Benefits

- First-time homebuyers, move-up borrowers, and retirees.
- Stable monthly payments with fixed-rate mortgages.
- Flexible sources of funds for down payment including gifts, grants, sweat equity or an approved public agency or nonprofit secondary finance program.
- Low 3% down payment option for very low- to low-income borrowers.

### Key Features

- Purchase and no cash out refinancing.
- 1-Unit: 97% LTV/ 105% TLTV\*/ 97% HTLTV.
- 2-4 Unit: 95% LTV/ 105% TLTV\*/ 97% HTLTV.
- Sweat equity allowed for the entire amount of down payment and closing costs.
- Ability to cancel mortgage insurance after reaching 20% equity resulting in reduced monthly mortgage payments.
- Loan Product Advisor or manual underwriting.
- No reserves required for 1-unit properties for manually underwritten mortgages.

\*A TLTV ratio up to 105% is permitted when secondary financing is an Affordable Second for Freddie Mac.



# Home Possible® Overview

Home Possible



Feature	Home Possible	Standard Conventional
<b>Eligible Mortgages</b>	15, 20, and 30-year fixed 5/5 and 5/6-month, 7/6-month, 10/6-month ARM	15, 20, and 30-year fixed 5/1, 5/5, 7/1 and 10/1 CMT- and LIBOR-indexed ARMS
<b>Maximum LTV</b>	1- Unit: 97% 2-4 Unit: 95%	1- Unit: 95% 2-Unit: 85% 3-4 Unit: 80%
<b>Maximum TLTV</b>	105% affordable second 97% secondary financing	95%
<b>Occupancy</b>	1- 4 Unit primary residence	Primary residence, second home, or investment property
<b>Property Type</b>	1 - 4 Unit: Single-Family, Condos, PUDs, Manufactured Housing (1-unit primary residences only)	1- 4 Unit: Single-Family, Condos, PUDs, Manufactured Housing
<b>Other Income</b>	Boarder income (1-Unit properties only)	All income considered
<b>Mortgage Insurance</b>	Lender Paid Single Premium MI and Financed Single Premium MI allowed	Lender Paid or Borrower Paid
<b>Underwriting Method</b>	Loan Product Advisor® (LPA) or Manual – LPA flags Home Possible eligible loans	LPA or LQA
<b>No Credit Score Borrowers</b>	Borrowers with no credit score can be evaluated through LPA	At least one borrower on the transaction must have a usable credit score
<b>Income Limit</b>	Determined by LPA; Non-LPA HP eligibility is determined by the HP Income and Eligibility Tool	No Income Limits
<b>Geographic Limit</b>	No Geographic Limits	No Geographic Limits

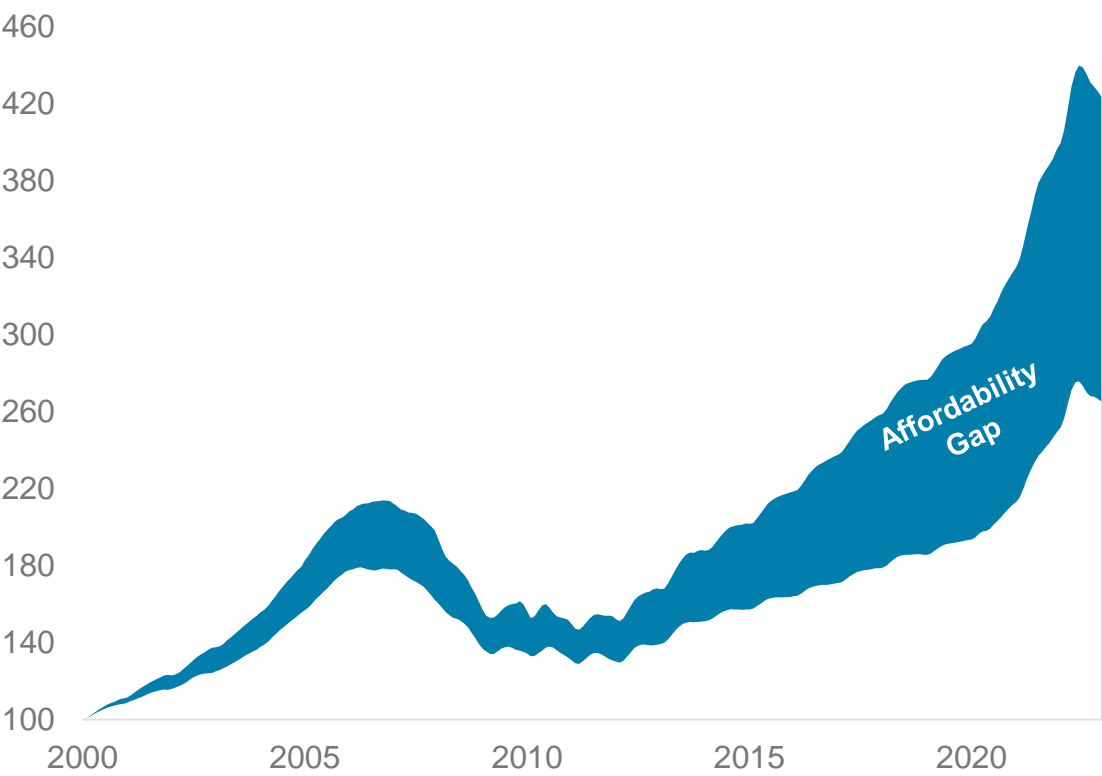
Mortgage Insurance Coverage Levels				
	Home Possible Fixed Rate >20yrs		Non-Home Possible Fixed Rate >20yrs	
	Standard	Custom*	Standard	Custom*
<b>&gt;80% &amp; ≤85% LTV</b>	12%	6%	12%	6%
<b>&gt;85% &amp; ≤90% LTV</b>	25%	12%	25%	12%
<b>&gt;90% &amp; ≤95% LTV</b>	25%	16%	30%	16%
<b>&gt;95% &amp; ≤97% LTV</b>	25%	18%	35%	18%
*If custom mortgage insurance is chosen, in addition to all other applicable delivery fees, the custom mortgage insurance delivery fee applies, including on Home Possible Mortgages				



# U.S. Housing Market Overview

## Entry-Level Home Prices Skyrocket

Affordability Gap Rapidly Rising  
*Cumulative Gap Between Entry Level and High End Home Prices –  
Home Price Index Level*



Source: NAR, Census and CoreLogic. Entry level home prices are homes that sell at 75% of the median or below. High end home prices sell at 125% of the median or higher. Last data point December 2022.

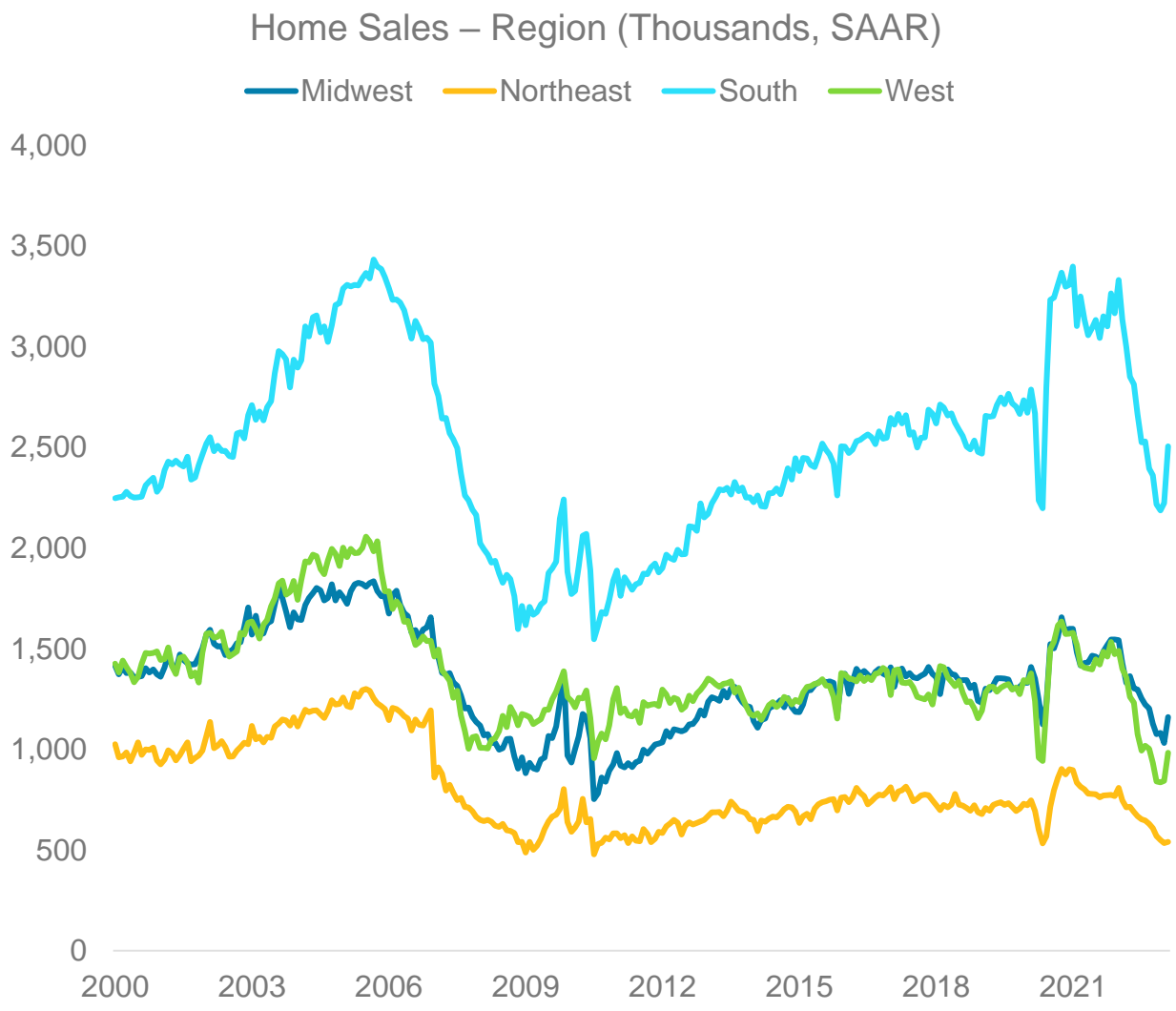
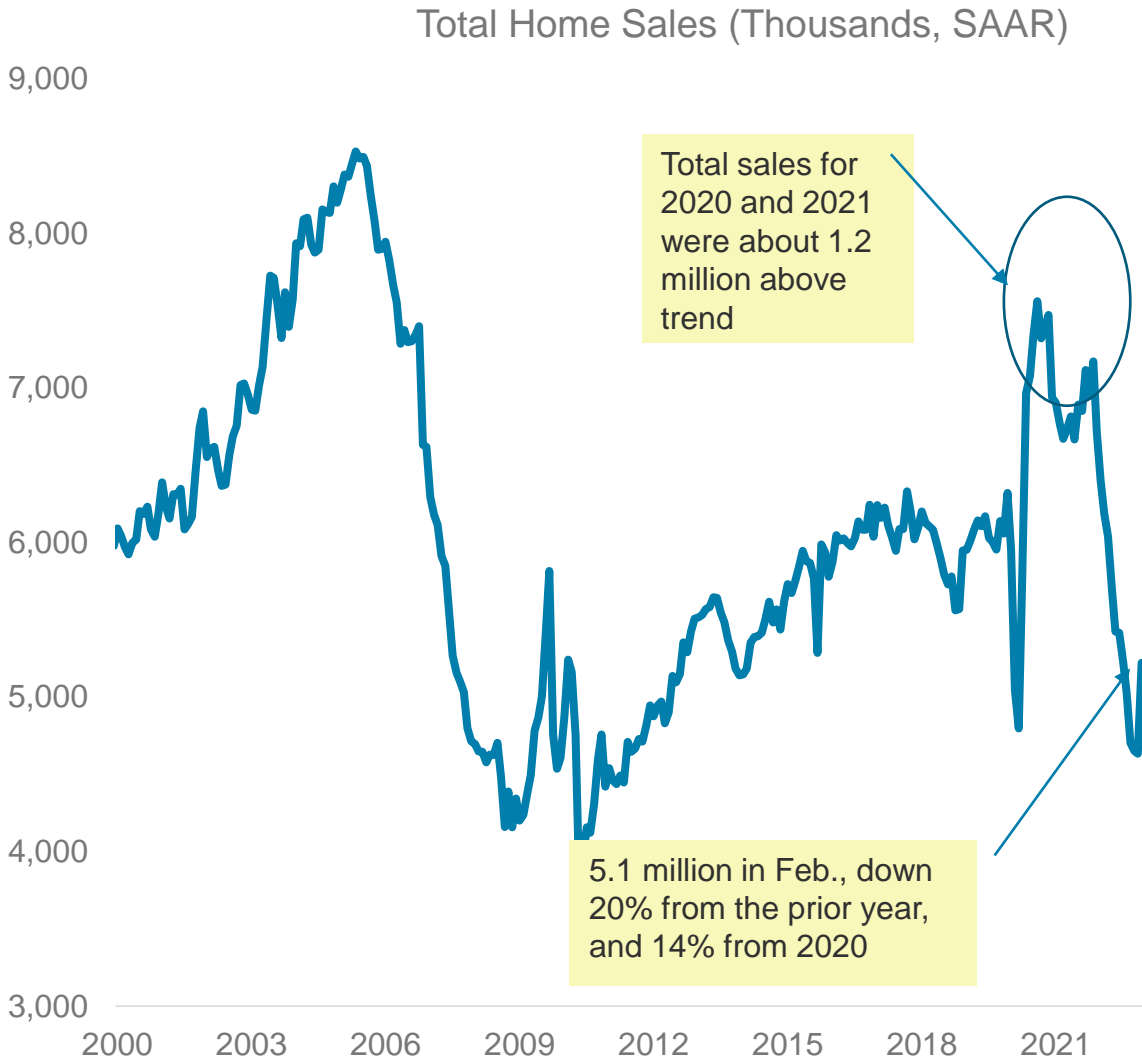
## Freddie Mac House Price Index - March 2023 (YoY %, SA)



Source: Freddie Mac

# Origination Trends

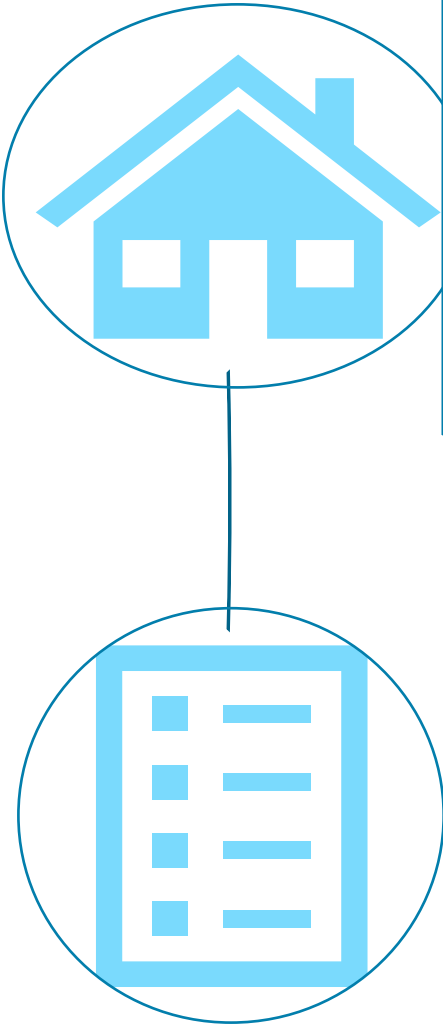
## Q1 2023: Home Sales Cooled Due to Rapidly Rising Rates & Deteriorating Affordability



Sources: National Association of Realtors (NAR); U.S. Census Bureau. Total sales includes new and existing SF until 1999, when existing condos and coops are included  
Note: Data as of March 2023



# Resources



## Credit Risk Transfer

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**Jeff Shue**

*Senior Director*

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## Resources

In addition, we have additional resources readily available in the [CRT Resource Hub](#).



Freddie Mac has made available the Single-Family Loan-Level Dataset as part of a larger effort to increase transparency; the dataset includes loan-level origination and monthly loan performance data on over 45.5 million loans.

[freddiemac.com/research/datasets/sf\\_loanlevel\\_dataset.page](https://freddiemac.com/research/datasets/sf_loanlevel_dataset.page)

Additionally, Freddie Mac releases a STACR Loan-Level Dataset for all deals on a monthly basis. Access the data files, disclosure file layout, and glossary here:

[crt.freddiemac.com/offerings/stacr.aspx#overview-details](https://crt.freddiemac.com/offerings/stacr.aspx#overview-details)

In 2019, Clarity® launched bringing further insight into Freddie Mac's CRT program. Origination and Performance metrics are available with new enhancements scheduled.

[clarity.freddiemac.com/](https://clarity.freddiemac.com/)

Additional information about Freddie Mac's Single-Family CRT offerings, including: issuance calendars, historical performance presentations, NAIC designations and more can be found at:

[crt.freddiemac.com/](https://crt.freddiemac.com/)

Freddie Mac’s credit risk offerings have deep market support. Analyze and Model transactions using these tools:

Freddie Mac  
CLARITY

<b>Credit Suisse</b> Locus Tool	<b>Milliman</b> M-Pire
<b>J.P. Morgan</b> Morgan Markets	<b>RiskSpan</b> Edge
<b>Bloomberg</b> Terminal/BTM Model	<b>CoreLogic</b> Property Data Leader
<b>LSEG</b> Yield Book	<b>TheNumber</b> Analytics and Data Management



# Disaster Relief Servicing Resources

Resources



[Freddie Mac Disaster Relief Web Page](#)

[Managing Hazard Insurance Losses Reference](#)

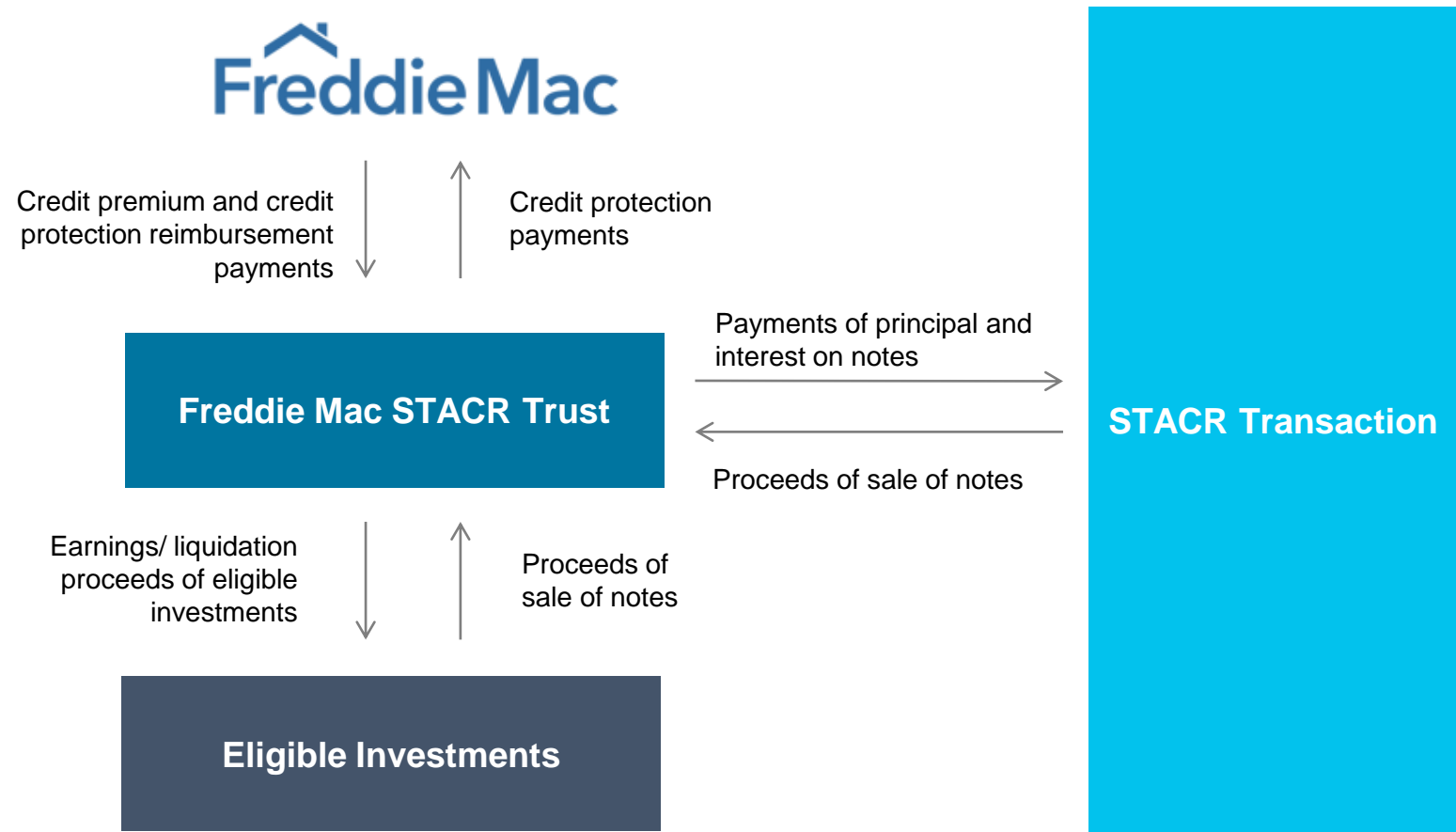
[Guide Chapter 8404](#)

[Seller/Service Guide](#)



# Appendix

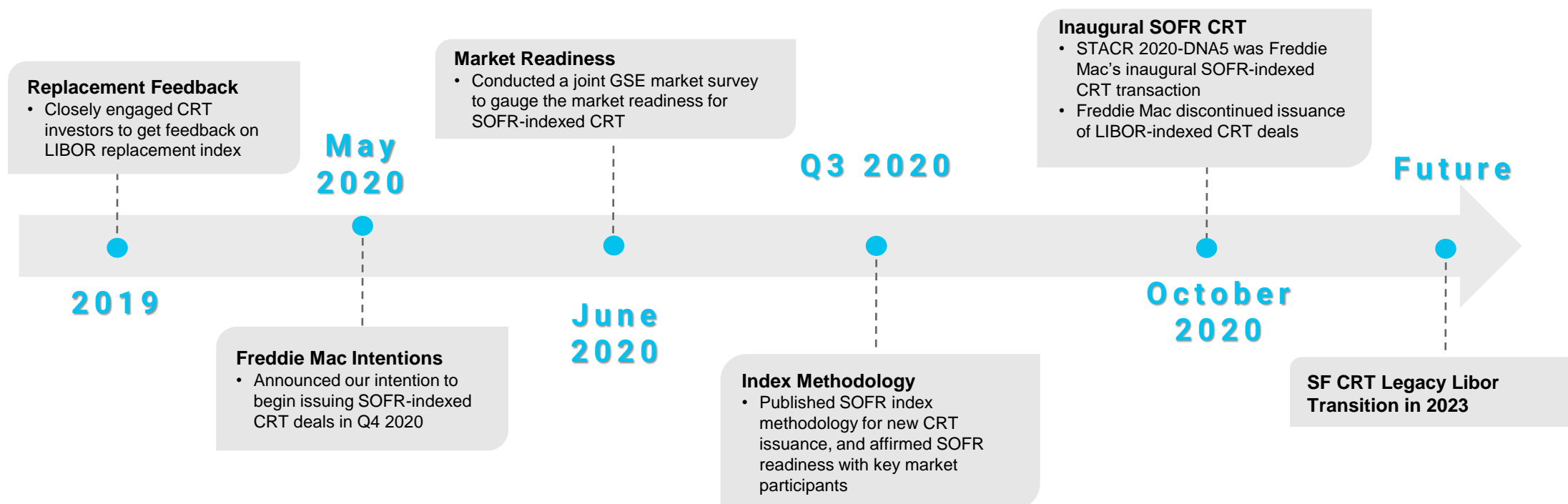
# STACR Trust Structure



# Transition to SOFR-Indexed CRT Issuance



- Reducing LIBOR exposure and LIBOR transition risk for investors has been a high priority for Freddie Mac
- Freddie Mac has been a market leader in LIBOR transition and successfully issued floating rate notes (FRNs), agency CMOs, Multifamily K-Deal® and a STACR deal that are indexed to SOFR





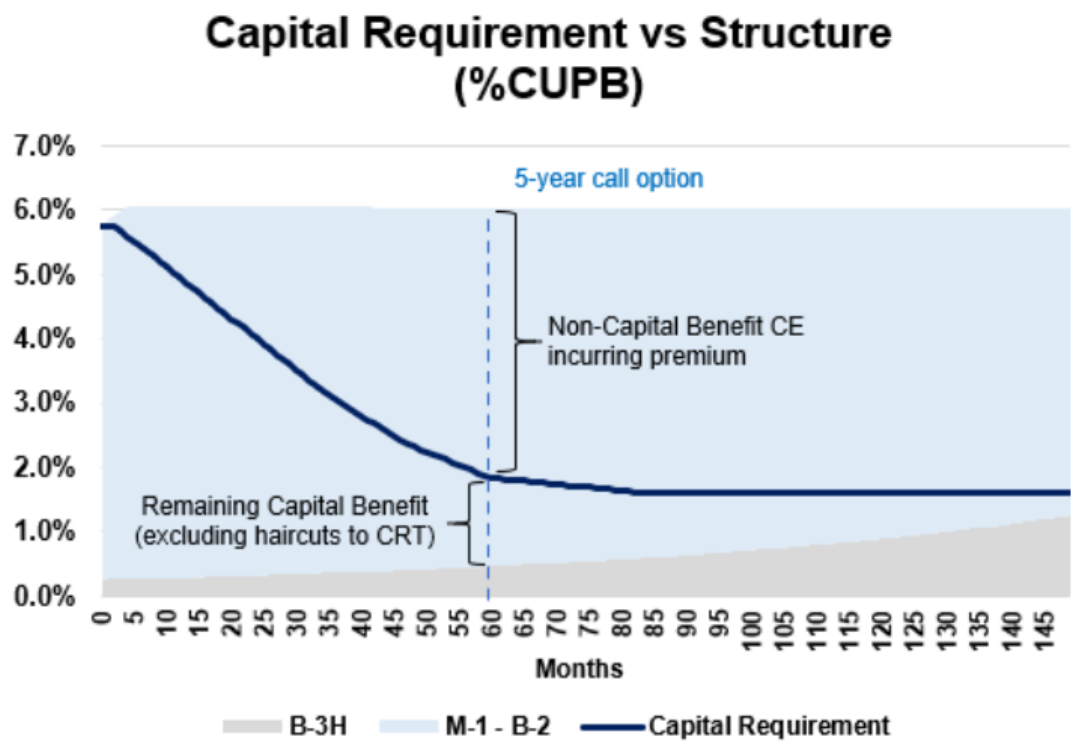
Since developing the tender offer program in 2021, Freddie Mac has successfully conducted five STACR® tender offers, totaling approximately \$9,592 million original principal amount (\$6,925 million current principal amount) in repurchased bonds.

STACR® tender offers allow Freddie Mac to reduce the interest expense on STACR® notes that no longer provide economically sensible credit protection to Freddie Mac. After a tender offer, all STACR® notes that are tendered and accepted are retired and cancelled.

STACR® tender offers inject liquidity to the market, especially for less liquid, off-the-run STACR® notes. All STACR® tender offers have provided noteholders with an opportunity to sell eligible STACR® notes at an announced tender price, without any adverse impact on the secondary market. For noteholders who decide not to tender, their notes remain outstanding, and the bond payments and credit enhancement levels are not affected by tender offers.

Through STACR tender offers, Freddie Mac accelerates principal payments to CRT noteholders, allowing them to potentially reinvest in on-the-run CRT new issue notes.

Call Rationale Illustration



*Assumes structure detaches at ERCF capital requirement at issuance  
Scenario: 10% CPR, 0.2% CDR, 25% Severity, Year 5 Cumulative HPA: ~15%*

Since 2021, Freddie Mac has exercised its 5-Year ACIS call option to wind down over \$1 billion in out-of-the-money coverage and save over \$100 million in future premium spend.

Freddie Mac retains sole discretion over whether or not to exercise any call options and the timing thereof, which may be impacted by market conditions.

Freddie Mac may exercise call options on STACR and ACIS deals, as specified in the applicable private placement memorandum and/or offering documents, and will determine when to exercise based on business objectives which may consider capital relief, cost, and other factors.



# Disclaimers



## **Freddie Mac obligations**

Freddie Mac's securities are obligations of Freddie Mac only. The securities, including any interest or return of discount on the securities, are not guaranteed by and are not debts or obligations of the United States or any federal agency or instrumentality other than Freddie Mac.

## **No offer or solicitation of securities**

This presentation includes information related to, or referenced in the offering documentation for, certain Freddie Mac securities, including offering circulars and related supplements and agreements. Freddie Mac securities may not be eligible for offer or sale in certain jurisdictions or to certain persons. This information is provided for your general information only, is current only as of its specified date and does not constitute an offer to sell or a solicitation of an offer to buy securities. The information does not constitute a sufficient basis for making a decision with respect to the purchase or sale of any security. All information regarding or relating to Freddie Mac securities is qualified in its entirety by the relevant offering circular and any related supplements. Investors should review the relevant offering circular and any related supplements before making a decision with respect to the purchase or sale of any security. In addition, before purchasing any security, please consult your legal and financial advisors for information about and analysis of the security, its risks and its suitability as an investment in your particular circumstances.

## **Forward-looking statements**

Freddie Mac's presentations may contain forward-looking statements, which may include statements pertaining to the conservatorship, the company's current expectations and objectives for its Single-family Guarantee, Multifamily and Capital Markets segments, its efforts to assist the housing market, liquidity and capital management, economic and market conditions and trends, market share, the effect of legislative and regulatory developments and new accounting guidance, credit quality of loans the company owns or guarantees, the costs and benefits of the company's credit risk transfer transactions, and results of operations and financial condition on a GAAP, Segment Earnings, non-GAAP and fair value basis. Forward-looking statements involve known and unknown risks and uncertainties, some of which are beyond the company's control. Management's expectations for the company's future necessarily involve a number of assumptions, judgments and estimates, and various factors, including changes in market conditions, liquidity, mortgage spreads, credit outlook, actions by

the U.S. government (including FHFA, Treasury and Congress), and the impacts of legislation or regulations and new or amended accounting guidance, could cause actual results to differ materially from these expectations. These assumptions, judgments, estimates and factors are discussed in the company's Annual Report on Form 10-K for the year ended December 31, 2021, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, which are available on the Investor Relations page of the company's website at [www.freddiemac.com/investors](http://www.freddiemac.com/investors) and the SEC's website at [www.sec.gov](http://www.sec.gov). The company undertakes no obligation to update forward-looking statements it makes to reflect events or circumstances occurring after the date of this presentation.





## Notice to all Investors:

This presentation ("Presentation") is not an offer to sell any Freddie Mac securities. Offers for any given security are made only through applicable private placement memoranda and any related supplements, which incorporate Freddie Mac's Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on February 10, 2022, and all documents that Freddie Mac files with the SEC pursuant to Section 13(a), 13(c) or 14 of the Exchange Act, excluding any information "furnished" to the SEC on Form 8-K. Content in this Presentation is not reflective of current markets/spreads and is not indicative of any future Freddie Mac offerings. Please use this Presentation for informational purposes only.

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## NOTICE TO INVESTORS IN THE EUROPEAN ECONOMIC AREA

THIS PRESENTATION IS NOT A PROSPECTUS FOR THE PURPOSES OF THE EU PROSPECTUS REGULATION (AS DEFINED BELOW). THE NOTES ARE NOT INTENDED TO BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO AND SHOULD NOT BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO ANY EEA RETAIL INVESTOR IN THE EUROPEAN ECONOMIC AREA (THE "EEA"). FOR THESE PURPOSES, AN "EEA RETAIL INVESTOR" MEANS A PERSON WHO IS ONE (OR MORE) OF THE FOLLOWING:

- (I) A RETAIL CLIENT AS DEFINED IN POINT (11) OF ARTICLE 4(1) OF DIRECTIVE 2014/65/EU (AS AMENDED, "MIFID II"); OR
- (II) A CUSTOMER WITHIN THE MEANING OF DIRECTIVE (EU) 2016/97, WHERE THAT CUSTOMER WOULD NOT QUALIFY AS A PROFESSIONAL CLIENT AS DEFINED IN POINT (10) OF ARTICLE 4(1) OF MIFID II; OR
- (III) NOT A QUALIFIED INVESTOR AS DEFINED IN ARTICLE 2 OF REGULATION (EU) 2017/1129 (AS AMENDED, THE "EU PROSPECTUS REGULATION").

CONSEQUENTLY, NO KEY INFORMATION DOCUMENT REQUIRED BY REGULATION (EU) NO. 1286/2014 (AS AMENDED, THE "EU PRIIPS REGULATION") FOR OFFERING OR SELLING THE NOTES OR OTHERWISE MAKING THEM AVAILABLE TO RETAIL INVESTORS IN THE EEA HAS BEEN PREPARED AND THEREFORE OFFERING OR SELLING THE NOTES OR OTHERWISE MAKING THEM AVAILABLE TO ANY EEA RETAIL INVESTOR IN THE EEA MAY BE UNLAWFUL UNDER THE EEA PRIIPS REGULATION. THIS PRESENTATION HAS BEEN PREPARED ON THE BASIS THAT ANY OFFER OF THE NOTES IN THE EEA WILL ONLY BE MADE TO QUALIFIED INVESTORS. ACCORDINGLY ANY PERSON MAKING OR INTENDING TO MAKE AN OFFER IN THE EEA OF NOTES WHICH ARE THE SUBJECT OF THE OFFERING CONTEMPLATED IN THIS PRESENTATION MAY ONLY DO SO WITH RESPECT TO QUALIFIED INVESTORS. NONE OF THE TRUST, THE SPONSOR OR ANY OF THE INITIAL PURCHASERS HAS AUTHORIZED, NOR DO THEY AUTHORIZE, THE MAKING OF ANY OFFER OF NOTES IN THE EEA OTHER THAN TO QUALIFIED INVESTORS.

## MIFID II PRODUCT GOVERNANCE

ANY DISTRIBUTOR SUBJECT TO MIFID II THAT IS OFFERING, SELLING OR RECOMMENDING THE NOTES IS RESPONSIBLE FOR UNDERTAKING ITS OWN TARGET MARKET ASSESSMENT IN RESPECT OF THE NOTES AND DETERMINING ITS OWN DISTRIBUTION CHANNELS FOR THE PURPOSES OF THE MIFID II PRODUCT GOVERNANCE

## NOTICE TO INVESTORS IN THE UNITED KINGDOM

### PROHIBITION ON SALES TO UK RETAIL INVESTORS

THE NOTES ARE NOT INTENDED TO BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO AND SHOULD NOT BE OFFERED, SOLD OR OTHERWISE MADE AVAILABLE TO ANY UK RETAIL INVESTOR IN THE UNITED KINGDOM (THE "UK"). FOR THESE PURPOSES, A "UK RETAIL INVESTOR" MEANS A PERSON WHO IS ONE (OR MORE) OF THE FOLLOWING: (I) A RETAIL CLIENT AS DEFINED IN POINT (8) OF ARTICLE 2 OF REGULATION (EU) 2017/565 AS IT FORMS PART OF UK DOMESTIC LAW BY VIRTUE OF THE EUROPEAN UNION (WITHDRAWAL) ACT 2018 (AS AMENDED, THE "EUWA"); OR (II) A CUSTOMER WITHIN THE MEANING OF THE PROVISIONS OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (AS AMENDED, THE "FSMA") AND ANY RULES OR REGULATIONS MADE UNDER THE FSMA TO IMPLEMENT DIRECTIVE (EU) 2016/97, WHERE THAT CUSTOMER WOULD NOT QUALIFY AS A PROFESSIONAL CLIENT, AS DEFINED IN POINT (8) OF ARTICLE 2(1) OF REGULATION (EU) NO. 600/2014 AS IT FORMS PART OF UK DOMESTIC LAW BY VIRTUE OF THE EUWA; OR (III) NOT A QUALIFIED INVESTOR AS DEFINED IN ARTICLE 2 OF REGULATION (EU) 2017/1129 AS IT FORMS PART OF UK DOMESTIC LAW BY VIRTUE OF THE EUWA. CONSEQUENTLY, NO KEY INFORMATION DOCUMENT REQUIRED BY REGULATION (EU) NO. 1286/2014 AS IT FORMS PART OF UK DOMESTIC LAW (AS AMENDED, THE "UK PRIIPS REGULATION") FOR OFFERING OR SELLING THE NOTES OR OTHERWISE MAKING THEM AVAILABLE TO UK RETAIL INVESTORS IN THE UK HAS BEEN PREPARED AND THEREFORE OFFERING OR SELLING THE NOTES OR OTHERWISE MAKING THEM AVAILABLE TO ANY UK RETAIL INVESTOR IN THE UK MAY BE UNLAWFUL UNDER THE UK PRIIPS REGULATION.



## **FINANCIAL PROMOTION REGIME AND PROMOTION OF COLLECTIVE INVESTMENT SCHEMES REGIME**

THE TRUST MAY CONSTITUTE A "COLLECTIVE INVESTMENT SCHEME" AS DEFINED BY SECTION 235 OF THE FSMA THAT IS NOT A "RECOGNIZED COLLECTIVE INVESTMENT SCHEME" FOR THE PURPOSES OF THE FSMA AND THAT HAS NOT BEEN AUTHORIZED, REGULATED OR OTHERWISE RECOGNIZED OR APPROVED. AS AN UNREGULATED SCHEME, THE NOTES CANNOT BE MARKETED IN THE UNITED KINGDOM TO THE GENERAL PUBLIC, EXCEPT IN ACCORDANCE WITH THE FSMA.

THE COMMUNICATION OF THIS PRESENTATION (A) IF MADE BY A PERSON WHO IS NOT AN AUTHORIZED PERSON UNDER THE FSMA, IS BEING MADE ONLY TO, OR DIRECTED ONLY AT, PERSONS WHO (I) ARE OUTSIDE THE UNITED KINGDOM, OR (II) HAVE PROFESSIONAL EXPERIENCE IN MATTERS RELATING TO INVESTMENTS AND QUALIFY AS INVESTMENT PROFESSIONALS IN ACCORDANCE WITH ARTICLE 19(5) OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (FINANCIAL PROMOTION) ORDER 2005 (THE "FINANCIAL PROMOTION ORDER"), OR (III) ARE PERSONS FALLING WITHIN ARTICLE 49(2)(A) THROUGH (D) (HIGH NET WORTH COMPANIES, UNINCORPORATED ASSOCIATIONS, ETC.) OF THE FINANCIAL PROMOTION ORDER (ALL SUCH PERSONS TOGETHER BEING REFERRED TO AS "FPO PERSONS"), OR (IV) ARE ANY OTHER PERSONS TO WHOM IT MAY OTHERWISE LAWFULLY BE COMMUNICATED OR DIRECTED; AND (B) IF MADE BY A PERSON WHO IS AN AUTHORIZED PERSON UNDER THE FSMA, IS BEING MADE ONLY TO, OR DIRECTED ONLY AT, PERSONS WHO (I) ARE OUTSIDE THE UNITED KINGDOM, OR (II) HAVE PROFESSIONAL EXPERIENCE IN MATTERS RELATING TO INVESTMENTS AND QUALIFY AS INVESTMENT PROFESSIONALS IN ACCORDANCE WITH ARTICLE 14(5) OF THE FINANCIAL SERVICES AND MARKETS ACT 2000 (PROMOTION OF COLLECTIVE INVESTMENT SCHEMES) (EXEMPTIONS) ORDER 2001 (THE "PROMOTION OF COLLECTIVE INVESTMENT SCHEMES EXEMPTIONS ORDER"), OR (III) ARE PERSONS FALLING WITHIN ARTICLE 22(2)(A) THROUGH (D) ("HIGH NET WORTH COMPANIES, UNINCORPORATED ASSOCIATIONS, ETC.") OF THE PROMOTION OF COLLECTIVE INVESTMENT SCHEMES EXEMPTIONS ORDER, OR (IV) ARE PERSONS TO WHOM THE TRUST MAY LAWFULLY BE PROMOTED IN ACCORDANCE WITH CHAPTER 4.12 OF THE FCA HANDBOOK CONDUCT OF BUSINESS SOURCEBOOK (ALL SUCH PERSONS, TOGETHER WITH FPO PERSONS, "RELEVANT PERSONS").

THIS PRESENTATION MUST NOT BE ACTED ON OR RELIED ON BY PERSONS WHO ARE NOT RELEVANT PERSONS. ANY INVESTMENT OR INVESTMENT ACTIVITY TO WHICH THIS PRESENTATION RELATES, INCLUDING THE NOTES, IS AVAILABLE ONLY TO RELEVANT PERSONS AND WILL BE ENGAGED IN ONLY WITH RELEVANT PERSONS. ANY PERSONS OTHER THAN RELEVANT PERSONS SHOULD NOT ACT OR RELY ON THIS PRESENTATION. POTENTIAL INVESTORS IN THE UNITED KINGDOM ARE ADVISED THAT ALL, OR MOST, OF THE PROTECTIONS AFFORDED BY THE UNITED KINGDOM REGULATORY SYSTEM WILL NOT APPLY TO AN INVESTMENT IN THE NOTES AND THAT COMPENSATION WILL NOT BE AVAILABLE UNDER THE UNITED KINGDOM FINANCIAL SERVICES COMPENSATION SCHEME.

### **Notice to Canadian Investors:**

The Notes may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the Notes must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

### **Notice to Spanish Investors:**

No action has been or will be taken by Freddie Mac that would permit a public offering of the Notes in Spain non-exempted from the prospectus requirement. Neither the Notes nor the offering have been or will be registered or approved by the Spanish Securities Market Commission (Comisión Nacional del Mercado de Valores) ("CNMV") and, therefore, no prospectus has been or will be registered or approved by the CNMV for the purposes of this offering.



## Notice to Japanese Investors:

The Notes have not been and will not be registered under FIEA and, accordingly, each Initial Purchaser undertakes that it will not offer or sell any Notes directly or indirectly, in Japan or to, or for the benefit of, any resident of Japan or to others for re-offering or resale, directly or indirectly, in Japan or to any resident of Japan except pursuant to an exemption from the registration requirements of, and otherwise in compliance with the FIEA and other relevant laws and regulations of Japan. As used in this paragraph, "resident of Japan" means any person resident in Japan, including any corporation or other entity organized under the laws of Japan.

## Notice to Korean Investors:

The Trust is not making any representation with respect to eligibility of any recipients of this Presentation to acquire the Notes referred to herein under the laws of Korea. The Notes offered under this Presentation have not been and will not be registered with the Financial Services Commission of Korea for public offering in Korea under FSCMA and are therefore subject to certain transfer restrictions. The Notes may not be offered, sold or delivered, directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea (as defined in the Foreign Exchange Transaction Law of Korea) except pursuant to the applicable laws and regulations of Korea, including the FSCMA and the Foreign Exchange Transaction Law and the decrees and regulations thereunder.

## Notice to Investors in the People's Republic of China ("PRC", for the sole purpose herein, excluding Hong Kong, Macau and Taiwan):

The Notes may not be offered or sold directly or indirectly within the PRC. The offering material or information contained herein relating to the Notes, which has not been and will not be submitted to or approved/verified by or registered with any relevant governmental authorities in the PRC (including but not limited to the China Securities Regulatory Commission ("CSRC")), may not be supplied to the public in the PRC or used in connection with any offer for the subscription or sale of the Notes in the PRC. The offering material or information contained herein relating to the Notes does not constitute an offer to sell or the solicitation of an offer to buy any securities in the PRC.

The Notes may only be invested by PRC investors that are authorized to engage in the purchase of notes of the type being offered or sold, including but not limited to those that are authorized to engage in the purchase and sale of foreign exchange for themselves and on behalf of their customers and/or the purchase and sale of government bonds or financial bonds and/or the purchase and sale of debt securities denominated in foreign currency other than stocks. PRC investors are responsible for informing themselves about and observing all legal and regulatory restrictions, obtaining all relevant approvals/licenses, verification and/or registrations themselves from relevant governmental authorities (including but not limited to the People's Bank of China,

CSRC, the State Administration of Foreign Exchange, the China Banking and Insurance Regulatory Commission and other relevant regulatory bodies), and complying with all relevant PRC regulations, including, but not limited to, all relevant foreign exchange regulations and/or foreign investment regulations.

## Notice to Singaporean Investors:

SECTION 309B(1)(C) NOTIFICATION UNDER THE SECURITIES AND FUTURES ACT, CHAPTER 289 OF SINGAPORE: THE NOTES ARE CAPITAL MARKETS PRODUCTS OTHER THAN PRESCRIBED CAPITAL MARKETS PRODUCTS (AS DEFINED IN THE SECURITIES AND FUTURES (CAPITAL MARKETS PRODUCTS) REGULATIONS 2018 OF SINGAPORE) AND SPECIFIED INVESTMENT PRODUCTS (AS DEFINED IN MAS NOTICE SFA 04-N12: NOTICE ON THE SALE OF INVESTMENT PRODUCTS AND MAS NOTICE FAA-N16: NOTICE ON RECOMMENDATIONS ON INVESTMENT PRODUCTS). This Presentation has not been, and will not be, registered as a prospectus with the Monetary Authority of Singapore, and the Notes will be offered pursuant to exemptions under the Securities and Futures Act (Chapter 289 of Singapore) (the "SFA"). Accordingly, this Presentation or any document or material in connection with the offer or sale, or invitation for subscription or purchase, of the Notes may not be circulated or distributed, nor may the Notes be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to any persons in Singapore other than (i) to an institutional investor (as defined in Section 4A of the SFA) pursuant to Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA and (where applicable) Regulation 3 of the Securities and Futures (Classes of Investors) Regulations 2018 of Singapore or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

## Notice to Taiwanese Investors:

The Notes have not been and will not be registered with the Financial Supervisory Commission of Taiwan, the Republic of China pursuant to relevant securities laws and regulations and may not be offered or sold in Taiwan, the Republic of China through a public offering or in circumstance which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan, the Republic of China that requires a registration or approval of the Financial Supervisory Commission of Taiwan, the Republic of China. No person or entity in Taiwan, the Republic of China has been authorized to offer or sell the Notes in Taiwan, the Republic of China.

A prospective investor in securities of Freddie Mac must conduct its own independent review and due diligence to make its own assessment of the merits and risks of making an investment in, perform its own legal, accounting and tax analysis and conclude that the investment in the securities of Freddie Mac (i) is fully consistent with the investor's financial requirements and financial condition, investment objectives and risk tolerance; (ii) complies and is fully consistent with all investment policies, guidelines and restrictions applicable to the investor; and (iii) is a fit, proper and suitable investment for the investor.