



K-Deal[®] Program Overview

Investor Presentation

as of March 31, 2023



K-Deal[®] Program | Key Facts

As of March 31, 2023, we have securitized 25,267 loans totaling \$530.32 billion through K-Deal certificates

Key Features

- K-Deals are backed by newly acquired mortgages underwritten to Freddie Mac's industry-leading underwriting standards.
- Senior and interest-only classes are backed by Freddie Mac Guarantees
- NRSRO Ratings are acquired for our 7- and 10-year fixed-rate A-1, A-2 and X1 classes
- Guaranteed classes are Repo eligible

Benefits

- **Strong performance** of K-Deals, which are secured by assets with strong property fundamentals
- **Strong credit** underwritten to Freddie Mac's portfolio standards, plus the Freddie Mac guarantee
- **Call protection** associated with the prepayment features of defeasance, yield maintenance or static prepayment premiums
- **Liquidity** supported by expectations for repeatable and reliable issuance
- **Diversification** through pooled risk of many assets versus single-asset risk unless otherwise indicated
- **Servicing Standard** promotes transparency of Freddie Mac's servicing policy and protocols to the securitized servicing parties

K-Deal Mortgage Guidelines

The following are the general guidelines for Freddie Mac's Multifamily mortgage purchases that are intended for K-Deal securitization (subject to certain exceptions)

Property Type

- Origination requirements are focused on loans secured by occupied, stabilized and completed multifamily properties
- Limited amount of seniors housing, student housing, cooperative housing, military housing, manufactured housing communities (MHC) and Section 8 HAP contracts

Loan Terms

- Mortgages are fixed rate or floating rate
- Various loan terms including but not limited to 5-¹, 7- and 10-year terms generally with a maximum amortization of 30 years
- May contain initial interest-only (IO) periods
- Moderate exposure to full-term IO loans
- Full-term IO loans require higher initial amortizing debt service coverage ratio (DSCR) and lower loan-to-value (LTV) ratio
- Floating-rate mortgages are based on 30-day Average SOFR, generally require a third-party SOFR cap and are sized using a fixed rate equivalent
- Loans generally documented on Freddie Mac form loan documents, which may contain transaction-specific modifications

Borrowers

- Single-purpose entity (SPE) is required for all loans greater than or equal to \$5 million
- A carve-out guarantor is generally required
- Entity guarantors are acceptable but may require financial covenants or a material adverse change clause

¹ 5-year deal offering removed for Seniors and Student Housing

K-Deal Mortgage Guidelines (continued)

Underwriting

- Effective gross income is generally calculated based on trailing three-months actual rent collections or the annualized current rent roll minus a minimum 5% vacancy rate subject to submarket data and actual rent collections
 - Operating expenses are generally calculated based on trailing 12 months
 - Real estate taxes and insurance are based on actual annual expenses
 - Property values are based on third-party appraisals and internal value confirmation
 - Replacement reserves are typically required and are generally equal to the greater of an engineer's recommendation or \$250/unit or \$50/pad for MHCs
 - Tax and insurance escrows are generally required
 - Third-party SOFR caps that expire prior to related mortgage maturity date are required to be replaced. Replacement cap funds are escrowed at 125% of replacement cost and are recalculated on either a semi-annual or annual basis
 - Third-party reports are required (e.g., Phase I ESA, property condition, zoning, etc.)
 - Property condition, Phase I and Zoning reports are required for all loans over \$20 million, and for loans below \$20 million, the property condition and Phase 1 reports may be combined
-

LTV and DSCR

- Maximum LTV of 80%, minimum DSCR of 1.25x (fixed rate) and 1.00x on the max capped interest rate for floating-rate loans
 - Shorter loan terms or underperforming markets, and specialty product types typically require adjustments
 - All loans require a maturity risk analysis
-

Supplemental Financing

- Eligible one year after origination of the first mortgage
 - Purchased by Freddie Mac from original lender under Freddie Mac's supplemental mortgage product
 - Lower of 80% LTV or maximum LTV per loan agreement and minimum amortizing DSCR of 1.25x (fixed) or 1.10x (floating, at cap)
 - Re-underwriting required based on current property performance, an updated appraisal, financials and Freddie Mac's credit policy
 - Monthly escrows for taxes, insurance and replacement reserves. If the first mortgage allowed for deferral of tax, insurance and replacement reserve escrows, the supplemental will trigger the collection of those escrows on the first mortgage
-

K-Deal Optigo[®] Lenders

Freddie Mac buys loans from a network of approved Multifamily lenders who have over 150 branches nationwide, substantial experience and established performance records

- The Freddie Mac approved Optigo lender network promotes quality originations and a high level of service to borrowers
- Our lenders must comply with our standards for both origination and servicing of multifamily loans, which includes meeting minimum financial requirements and undergoing satisfactory annual audits

Optigo Conventional Lenders

Arbor Agency Lending LLC	JPMorgan Chase Bank, N.A.	Regions Bank
Bellwether Enterprise Real Estate Capital LLC	KeyBank, N.A.	Sabal Capital Partners LLC
Berkadia Commercial Mortgage LLC	Lument Capital	Walker & Dunlop LLC
Capital One N.A.	M&T Realty Capital Corporation	Wells Fargo Multifamily Capital
CBRE Capital Markets Inc.	Newmark	
CPC Mortgage Company LLC	NewPoint Real Estate Capital LLC	
Grandbridge Real Estate Capital LLC	NorthMarq Capital	
Greystone Servicing Company LLC	PGIM Real Estate	
JLL Real Estate Capital LLC	PNC Bank, N.A.	

K-Deal Placement Agents

Academy Securities Inc.*

AmeriVet Securities Inc.*

Bancroft Capital LLC *

Barclays Capital Inc.

Blaylock Van LLC

BMO Capital Markets Corp.

BofA Securities Inc.

Brean Capital LLC

Brownstone Investment Group LLC

Cantor Fitzgerald & Co.

CastleOak Securities L.P. *

Citigroup Global Markets Inc.

Deutsche Bank Securities Inc.

Drexel Hamilton LLC *

FHN Financial Capital Markets

Goldman Sachs & Co. LLC

J.P. Morgan Securities LLC

Jefferies LLC

Loop Capital Markets LLC *

Mischler Financial Group Inc.*

Mizuho Securities USA LLC

Morgan Stanley & Co. LLC

Multi-Bank Securities Inc. *

NatAlliance Securities LLC

Nomura Securities International Inc.

Oppenheimer & Co. Inc.

Performance Trust Capital Partners LLC

Piper Sandler & Co.

PNC Bank, National Association

Robert W. Baird & Co. Incorporated

Samuel A. Ramirez & Co. Inc.*

Santander US Capital Markets LLC

Siebert Williams Shank & Co. LLC *

Stern Brothers & Co. *

Stifel Nicolaus & Co Inc.

StoneX Financial Inc.

Truist Securities Inc.

UBS Securities LLC

Wells Fargo Securities LLC

* Freddie Mac engages Minority-, Diverse-, or Women-owned Businesses (MDWOBs), our diverse active broker-dealer network, on each of our transactions

Servicing Standard – Best-in-Class Service

The Freddie Mac Multifamily Servicing Standard aims to ensure best-in-class service through the life of the loan

Freddie Mac’s *Multifamily Seller/Servicer Guide* is the foundation of the “Servicing Standard” referred to in each securitization Pooling and Servicing Agreement (PSA)

- The Servicing Standard promotes transparency of Freddie Mac’s servicing policies and protocols to the securitized servicing parties

Freddie Mac surveils post-securitization loan servicing activity but is not a credit decision-maker

- Freddie Mac is the named servicing consultant in each PSA — standing by to share its credit philosophy if and when needed
 - In connection with such role, Freddie Mac created the Business Guidance Request process (commonly referred to as “What Would Freddie Do”) where Freddie Mac will provide a written analysis of such credit philosophy in response to an inquiry by a Master Servicer and/or Sub-Servicer (Primary Servicer)

K-Deal Special Servicers

- CWCapital Asset Management LLC
- Greystone Special Servicing
- KeyBank National Association
- LNR Partners LLC
- Midland Loan Services, Inc.
- SitusAMC Special Servicing and Distressed Asset Management
- Torchlight Loan Services
- Wells Fargo Bank, National Association

K-Deal Master Servicers

- KeyBank N.A.
- Midland Loan Services Inc.
- Wells Fargo Bank, N.A.
- Freddie Mac

K-Deal Trustee / Certificate Administrator

- Citibank N.A.
- Computershare Trust Company N.A.
- Deutsche Bank Trust Company Americas
- Freddie Mac
- U.S. Bank Trust Company N.A.
- Wells Fargo Bank N.A.
- Wilmington Trust N.A.

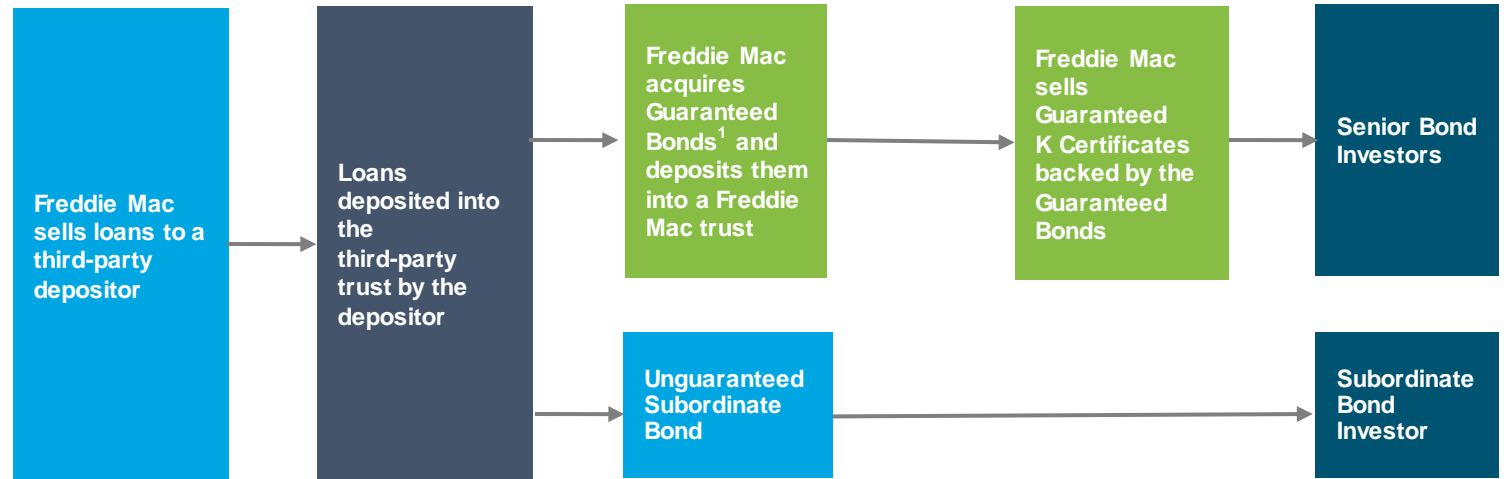
Typical Issuance Timeline



Transaction Structure

Freddie Mac securitizes loans via the K-Deal program through the following steps:

- The loans are sold to a third-party depositor that places the loans into a third-party trust
- Private label securities backed by the loans are issued by the third-party trust
- Freddie Mac purchases and guarantees certain bonds (Guaranteed Bonds¹) issued by the third-party trust and securitizes these bonds via a Freddie Mac trust
- The resulting Freddie Mac guaranteed structured pass-through certificates (K Certificates[®]) are publicly offered via placement agents
- The subordinate bond are issued by the third-party trust and are privately offered to investors via placement agents



RELEVANT PARTIES/ENTITIES

Underlying Mortgage Loan Seller
Freddie Mac

Underlying Originators
Optigo Lender(s)

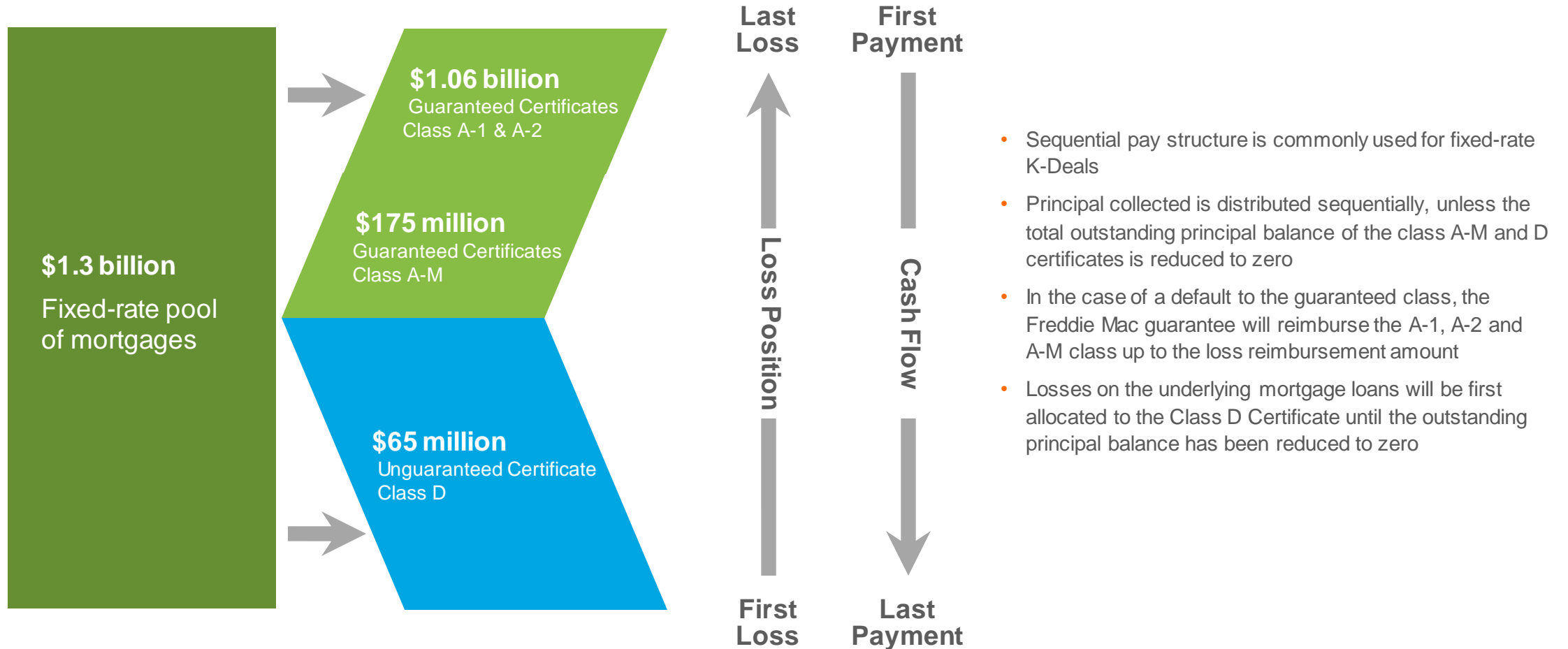
Underlying Master Servicer
Selected by Freddie Mac through bidding process

Underlying Special Servicer
Selected by subordinate bond investor in consultation with Freddie Mac

Underlying Trustee/Certificate Administrator
Selected by Freddie Mac through bidding process

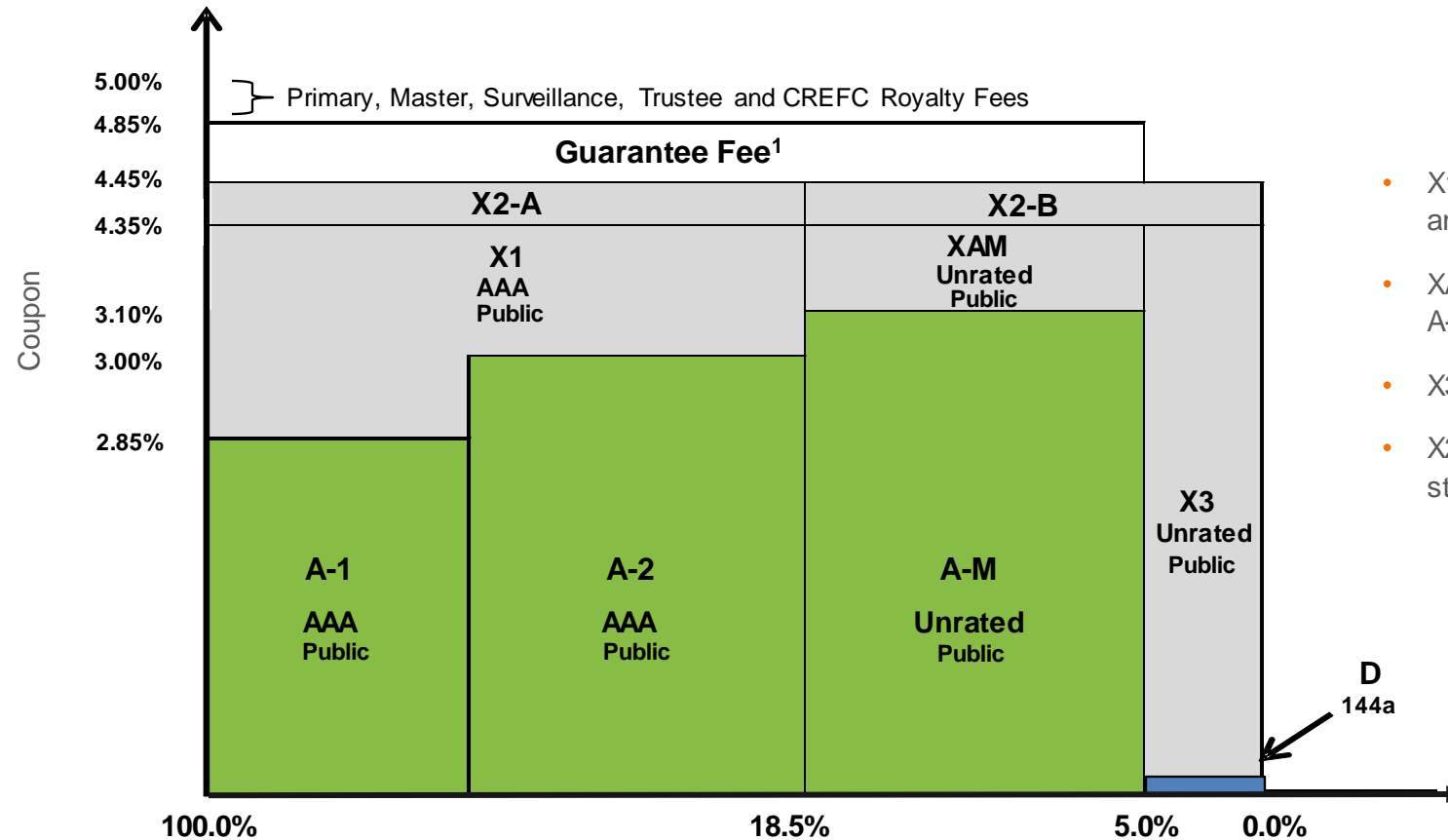
¹ Guaranteed Bonds include senior amortizing bonds as well as interest-only bonds derived from senior and subordinate P&I bonds
K-Deal Program © Freddie Mac Multifamily

Sample K-Deal Subordination – Sequential Pay

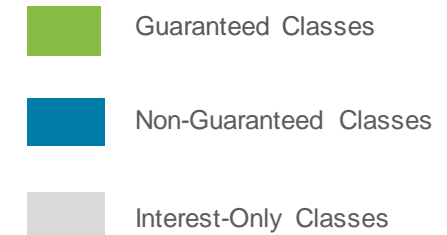


- Sequential pay structure is commonly used for fixed-rate K-Deals
- Principal collected is distributed sequentially, unless the total outstanding principal balance of the class A-M and D certificates is reduced to zero
- In the case of a default to the guaranteed class, the Freddie Mac guarantee will reimburse the A-1, A-2 and A-M class up to the loss reimbursement amount
- Losses on the underlying mortgage loans will be first allocated to the Class D Certificate until the outstanding principal balance has been reduced to zero

Sample K-Deal Fixed-Rate Coupon and Subordination



- X1 is a guaranteed interest-only class notional to the A-1 and A-2 class
- XAM is a guaranteed interest-only class notional to the A-M class
- X3 is notional to the class D certificates
- X2-A and X2-B are 10 bps point strip across the capital stack and retained by the B-piece buyer



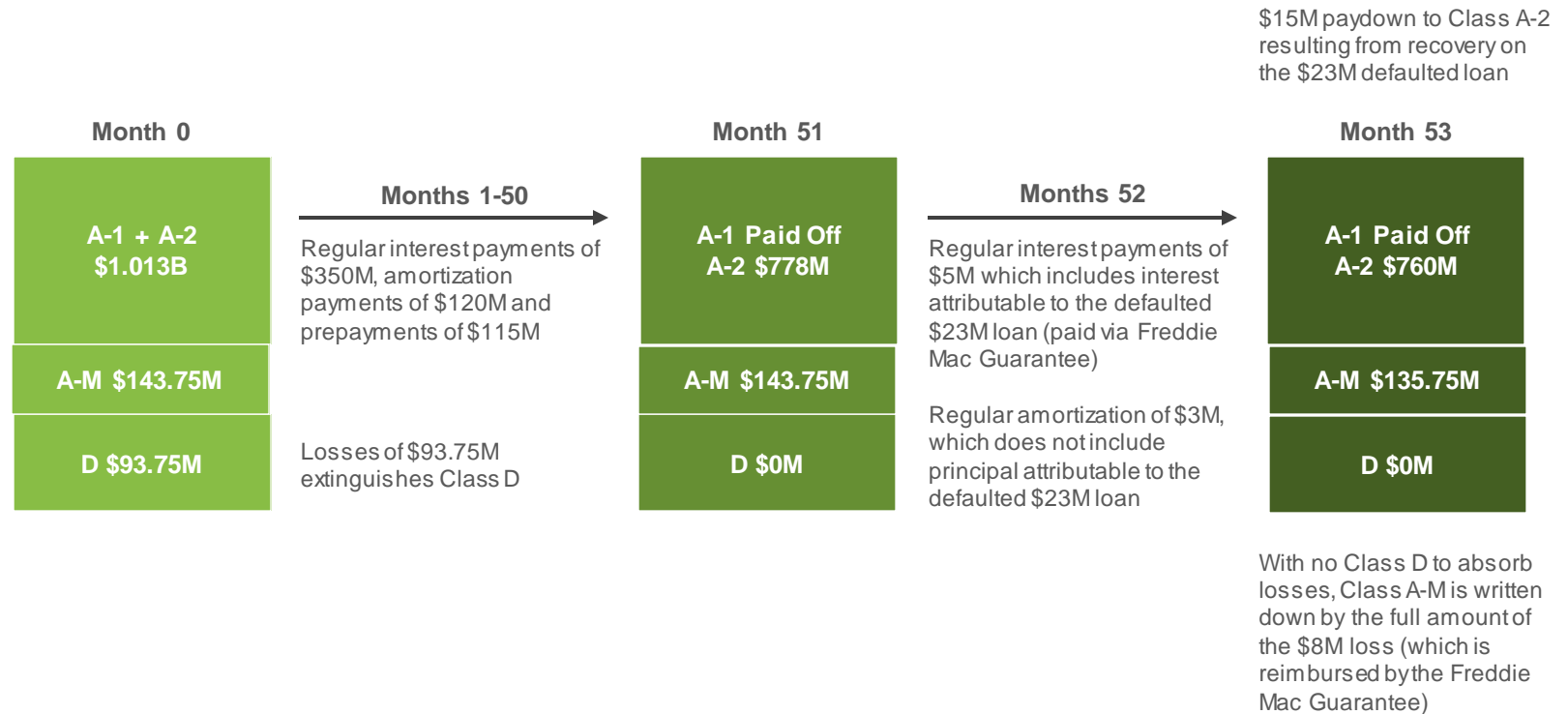
¹ Guarantee fee is multiplied by the outstanding principal balance of the A-1, A-2 and A-M certificates

Sample Fixed-Rate K-Deal Loss Scenarios

Scenario

Example of loan loss in Freddie Mac K-Deal structure

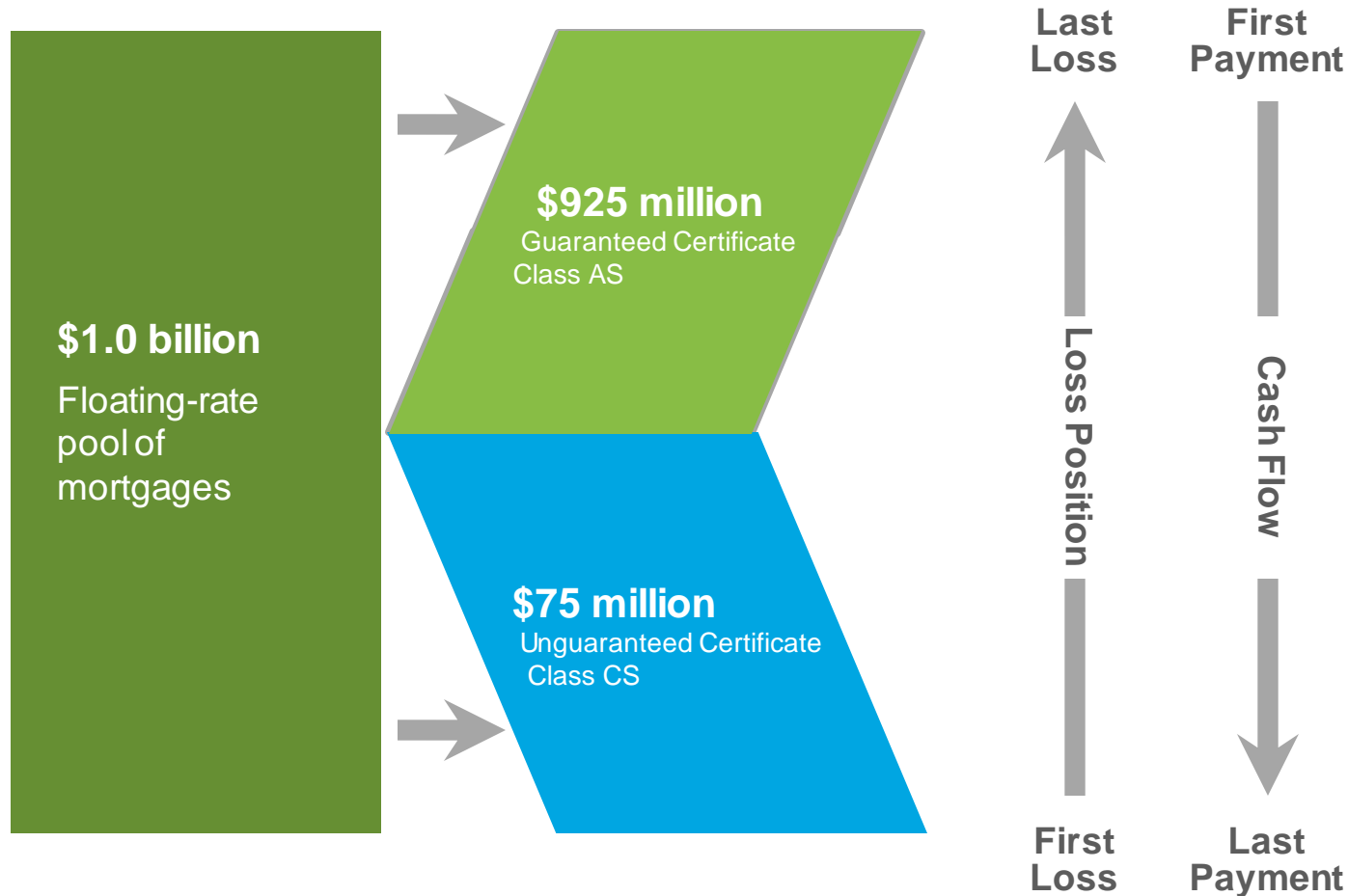
This loss example illustrates how the underlying certificates would be affected by loan defaults and the Freddie Mac guarantee assuming that the servicer is no longer making principal and interest advances with respect to the defaulted loans. This example is hypothetical and for illustrative purposes only. Class balances, loan balances and other mortgage pool characteristics described in this example do not reflect those of any actual underlying certificates or any actual underlying mortgage pools.



Assumptions

- Pool Size: \$1.25 billion
- Losses occur during the first 50 months resulting in Class D being written down to zero
- \$23 million loan defaults in month 51 (prior to loan maturity)
- Loan sold for \$15 million in month 53, \$8 million loss in month 53

Sample K-Deal Subordination – Pro Rata Pay



- Pro rata structure is commonly used for floating-rate K-Deals
- Principal collected is distributed pro rata, unless a Waterfall Trigger Event has occurred and is continuing
- A “Waterfall Trigger Event” occurs when (i) the number of non-specially serviced loans remaining in the pool falls below the designated threshold as defined in the securitization documents or (ii) the total outstanding principal balance of the non-specially serviced loans is less than a pre-determined percentage of the initial total pool balance
- Losses on the underlying mortgage loans will be first allocated to the Class CS Certificate until the outstanding principal balance has been reduced to zero

Sample K-Deal Floating-Rate Coupon and Subordination

Freddie Mac Multifamily began offering SOFR bonds (Class AS) collateralized by LIBOR-based loans with KF73 in December 2019. Our current SOFR-SOFR bond offerings follow the floating-rate bond structure in the diagram below.



- Distribution of interest will be made first to the Class AS and XS certificates concurrently on a pro rata basis
- The Class XS Certificates (i) receive interest-only payments indexed to SOFR and notional to Classes AS and CS, and (ii) are entitled to Static Prepayment Premiums
- Interest will be calculated based upon the published 30-day SOFR average¹

We began offering SOFR bonds (Classes AS, CS and XS) collateralized solely by SOFR-based loans starting with KF95 in Q4 2020

¹ The applicable SOFR average is published on or about 2:30 p.m. (New York time) on the New York Federal Reserve Bank's [website](#)

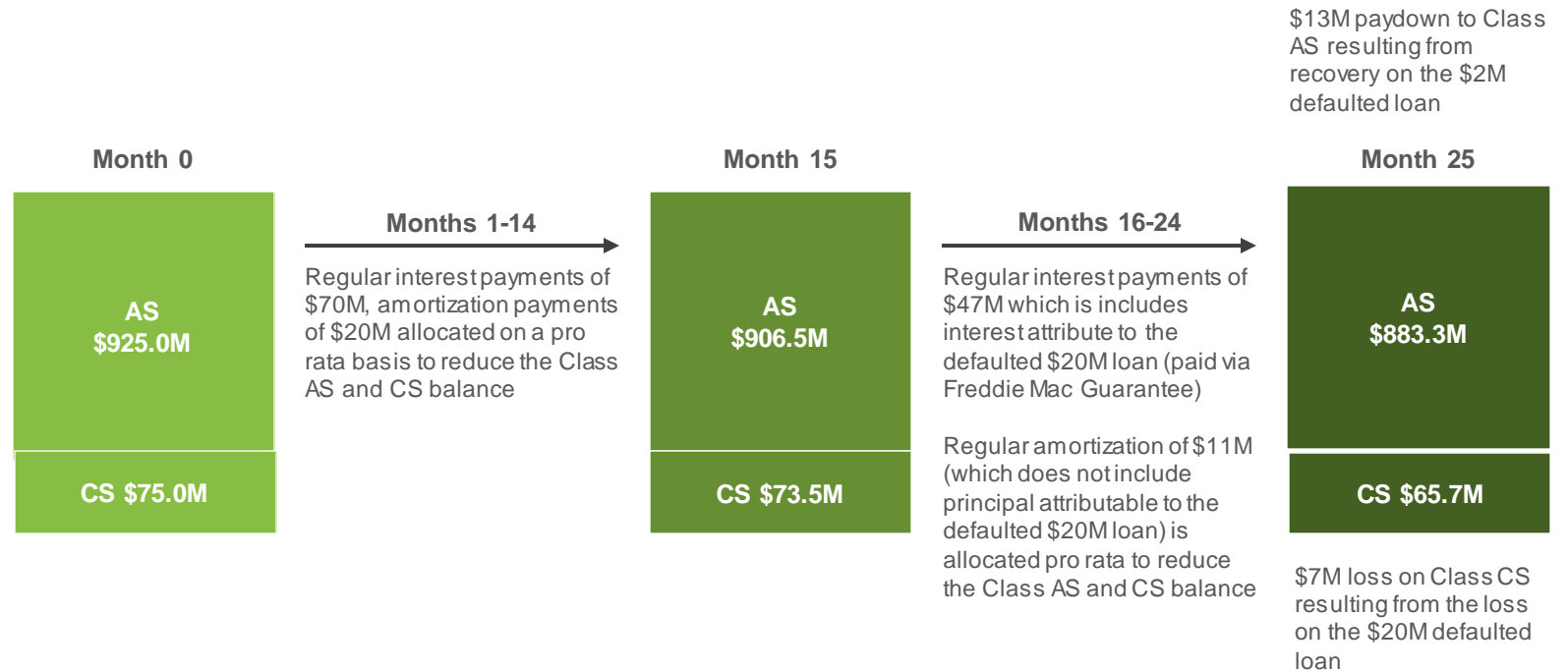
² For illustrative purposes only, class sizes do not reflect actual bond offering

Sample Floating-Rate K-Deal Loss Scenarios

Scenario

Example of loan loss in Freddie Mac K-Deal structure

This loss example illustrates how the underlying certificates would be affected by loan defaults and the Freddie Mac guarantee assuming that the master servicer is no longer making principal and interest advances with respect to the defaulted loans. This example is hypothetical and for illustrative purposes only. Class balances, loan balances and other mortgage pool characteristics described in this example do not reflect those of any actual underlying certificates or any actual underlying mortgage pools.



Assumptions

- Pool Size: \$1.0 billion
- \$20mm loan defaults in month 15 (prior to loan maturity)
- Loan sold for \$13 million in month 25, \$7 million loss in month 25

Call Protection

The following are the general guidelines for Freddie Mac's Multifamily mortgage call protections in the fixed and floating programs.

Defeasance (fixed-rate loans)

- During the defeasance period, voluntary prepayments are prohibited, but the real estate collateral securing the loan may be replaced with securities
- The securities must generate cash flows sufficient to make the scheduled loan payments as they become due, including payment in full on the maturity date
- The defeasance period is typically preceded by a lockout period during which voluntary prepayments are prohibited
- The defeasance period is typically followed by a window period during which prepayments in full are permitted without any prepayment premium

Yield Maintenance (fixed-rate loans)

- Prepayments on the loan are subject to a prepayment premium to maintain the yield of the original contract mortgage
- During the yield maintenance period, the premium is the greater of:
 - 1% of the principal being prepaid
 - The amount calculated pursuant to Freddie Mac's standard yield maintenance formula
- Any prepayment made after the yield maintenance period but before the start of the window period will be subject to a 1% prepayment premium on the amount being repaid

Step Down (floating-rate loans)

- Borrower must pay a prepayment premium of the amounts being prepaid over the life of the loan
 - The premium is a fixed percentage that decreases over time. For example, in a 5-4-3-2-1 step-down structure, the premium will equal 5% of the principal being prepaid for a set period, then 4% for the next set period, then 3%, etc
 - When the step-down periods end, there is a window period during which prepayments in full are permitted without any prepayment premium
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K-Deal Floating Prepayment

Floating-rate loans offer borrowers more prepayment flexibility

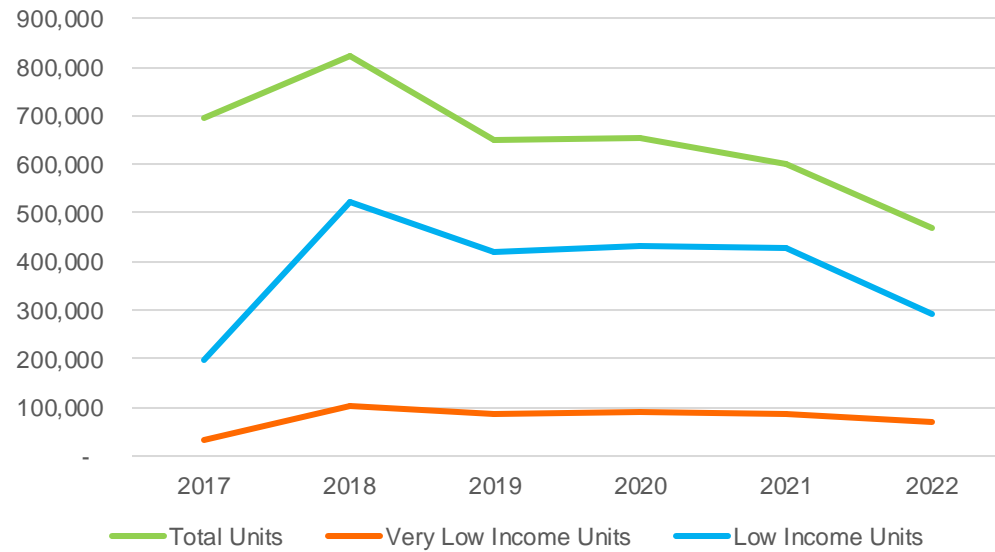
Floating Rate Prepayment Information ¹												
Origination Year	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Original Balance (Mil)	\$1,371.11	\$1,540.31	\$5,677.39	\$8,778.70	\$16,731.80	\$19,069.68	\$17,240.54	\$15,095.51	\$21,910.61	\$30,614.42	\$17,863.87	\$3,540.97
Original WAC	3.37%	2.96%	2.49%	2.30%	2.94%	3.54%	3.63%	4.74%	2.47%	2.72%	3.74%	6.43%
Current Balance (Mil)	\$0.00	\$0.00	\$0.00	\$84.08	\$499.10	\$1,419.63	\$3,132.64	\$6,558.52	\$9,864.56	\$21,017.02	\$17,558.79	\$3,540.91
Current WAC	0.00%	0.00%	0.00%	6.33%	7.33%	6.71%	6.28%	6.21%	6.87%	6.79%	6.63%	6.43%
K-Deal Vintage Percent Prepaid												
Years Since Securitization	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
<1	4.30%	0.00%	0.89%	0.26%	2.10%	0.44%	0.95%	0.11%	2.10%	3.43%	0.93%	0.00%
2	30.79%	34.66%	15.39%	20.07%	25.30%	24.56%	21.75%	8.99%	20.29%	23.24%	0.26%	
3	30.78%	37.73%	36.98%	25.54%	31.82%	27.91%	21.12%	29.12%	28.32%	2.32%		
4	15.93%	14.10%	22.69%	29.31%	22.86%	16.25%	20.09%	16.89%	2.03%			
5	12.41%	6.48%	14.28%	13.73%	5.45%	12.84%	14.49%	0.78%				
6	3.75%	5.34%	4.50%	4.65%	7.06%	9.37%	0.38%					
7	0.62%	0.00%	1.77%	4.15%	2.04%	0.27%						
8	1.43%	1.69%	3.51%	1.21%	0.24%							
9	0.00%	0.00%	0.00%	0.00%								
10	0.00%	0.00%	0.00%									
11	0.00%	0.00%										
12	0.00%											

¹ Information presented in the table is as of March 31, 2023
K-Deal Program © Freddie Mac Multifamily

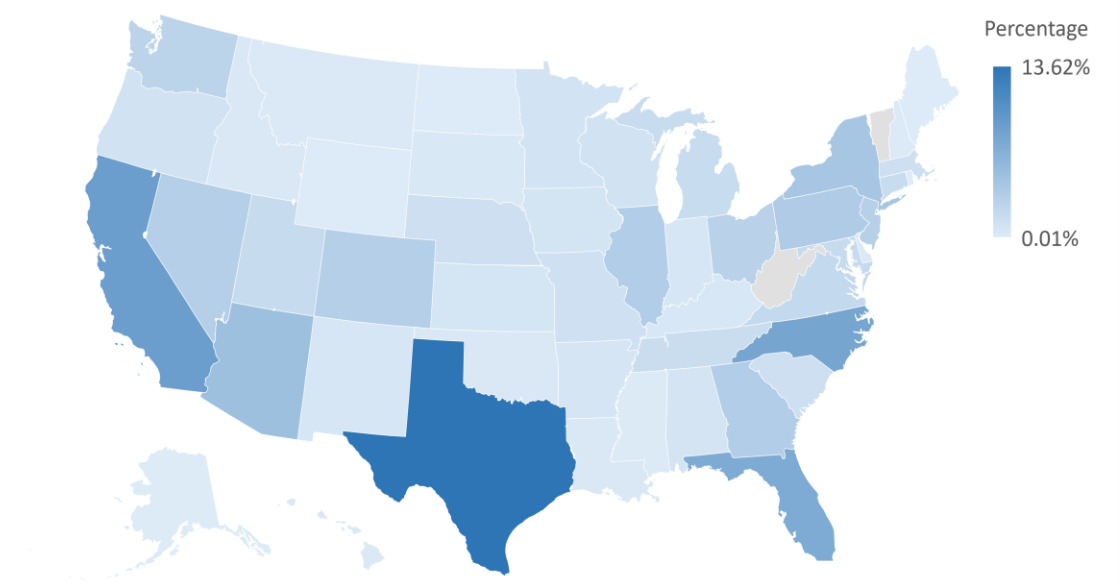
View our [Floating- and Fixed-Rate Loan Payment Report](#) for additional data

K-Deal Program | Community Reinvestment Act (CRA)

Securitized Affordable Units



% of Total CRA Credit Allocated



- \$25.1 billion has been allocated since 2017 with \$2.5 billion allocated in 2022
- 2.3 million low-income units ($\leq 80\%$ of area median income, AMI) and 0.5 million very low-income units ($\leq 50\%$ of AMI) have been securitized in the K-Deal program since 2017

- Our nationwide lending footprint provides investors the opportunity to meet their CRA needs with investments in properties across all 50 states
- Investors have sought CRA credit in 48 states plus the District of Columbia and Puerto Rico

* Freddie Mac makes no representation that the underlying mortgage assets will qualify as CRA eligible or will be accepted by any regulatory or governmental agency for CRA credit. Freddie Mac CRA side letters are only available to investors at new issue. As of December 31, 2022.

K-Deal Volume by Deal Type

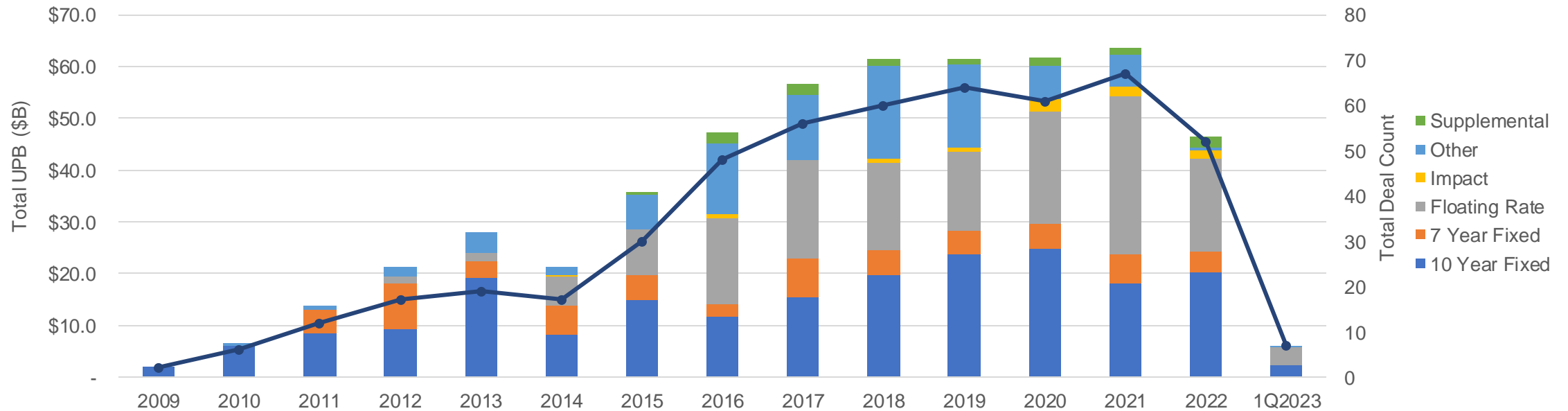
Deal Type	Descriptor	Description	# of Deals	Total UPB ¹ (\$ billion)
Total UPB			524	\$ 533.5
10-Year	K-000	Series for fixed loans with various terms, mostly 10-year terms	152	\$ 203.7
Floating Rate	K-F00	Series for loans with floating rates of various terms	152	\$ 159.1
7-Year	K-700	Series for fixed loans with 7-year terms	50	\$ 60.7
Single Sponsor	K-ABC	Series for Single-Sponsor loans, sometimes single asset	30	\$ 28.4
+10-Year	K-1500	Series for fixed loans with greater than 10 years	22	\$ 17.7
Seniors Housing	K-S00	Series for loans backed by multifamily mortgages on senior properties	15	\$ 10.6
Supplemental	K-J00	Series for supplemental loans	44	\$ 12.8
Workforce	K-W00	Series for workforce housing loans	10	\$ 6.1
Callable	K-C00	Series for loans with non-standard prepay terms	7	\$ 5.1
Value-Add	K-I00	Series for value-add loans	9	\$ 5.0
Large Loan	K-L00	Series for large loans	6	\$ 4.7
No-Subordination	K-P00	Series for portfolio loans, with no subordinate piece	5	\$ 4.3
5-Year	K-500	Series for fixed loans with 5-year terms	4	\$ 4.1
Green	K-G00	Series for Green Advantage® loans	7	\$ 3.8
Seasoned	K-X00	Series for seasoned loans	4	\$ 2.5
Sustainability	K-SG00	Series for loans selected in accordance to the Sustainability Bond Framework	4	\$ 2.5
Lease Up	K-LU0	Series for lease up loans	3	\$ 2.3

¹ Includes Value-Add (K-I00) Deal in which Freddie Mac is not the mortgage loan seller

K-Deal Securitization Volume (2009 – 1Q 2023)

Freddie remains dedicated to our mission, providing liquidity to the market through our consistent issuance

Execution Volume

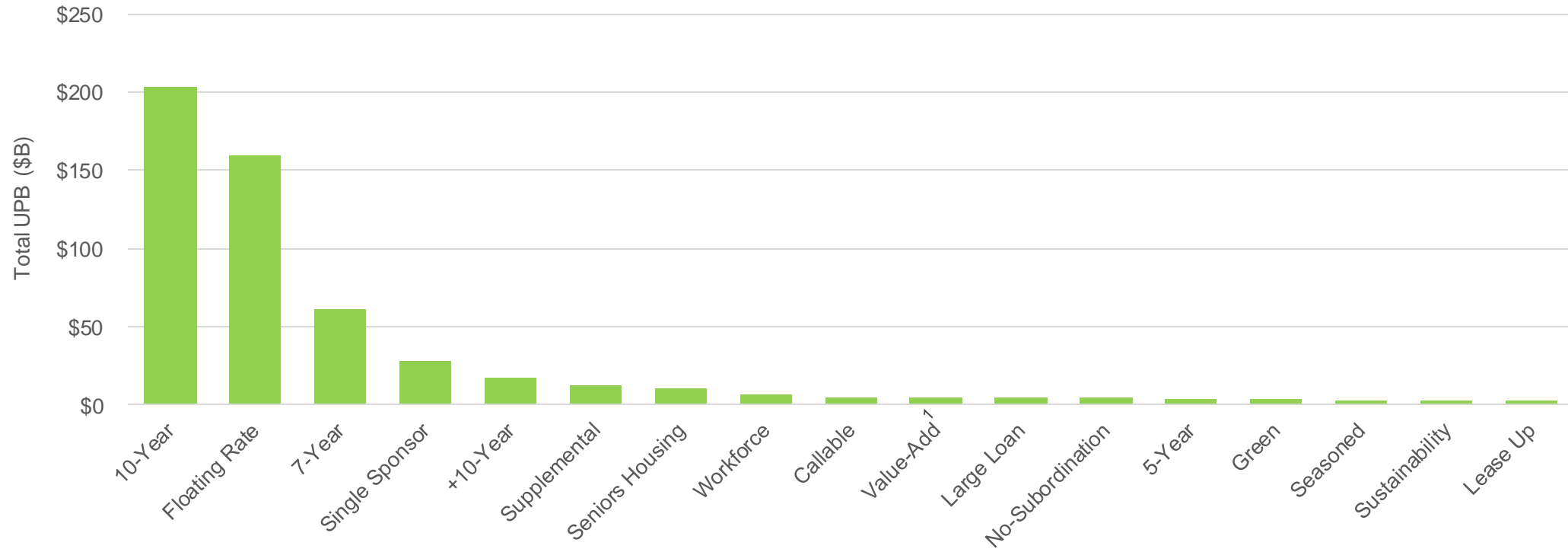


	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	1Q 2023	Total
10 Year Fixed	\$ 2.1	\$ 5.9	\$ 8.3	\$ 9.2	\$ 19.1	\$ 8.1	\$ 14.9	\$ 11.6	\$ 15.4	\$ 19.6	\$ 23.8	\$ 24.7	\$ 18.2	\$ 20.2	\$ 2.3	\$ 203.7
7 Year Fixed	-	-	\$ 4.6	\$ 8.9	\$ 3.4	\$ 5.6	\$ 4.8	\$ 2.4	\$ 7.5	\$ 4.8	\$ 4.5	\$ 4.8	\$ 5.5	\$ 4.0	-	\$ 60.7
Floating Rate	-	-	-	\$ 1.4	\$ 1.5	\$ 5.7	\$ 8.8	\$ 16.7	\$ 19.1	\$ 16.9	\$ 15.1	\$ 21.9	\$ 30.6	\$ 17.9	\$ 3.5	\$ 159.1
Supplemental	-	-	-	-	-	-	\$ 0.4	\$ 2.1	\$ 2.2	\$ 1.6	\$ 1.3	\$ 1.7	\$ 1.2	\$ 2.1	\$ 0.3	\$ 12.8
Impact	-	-	-	-	-	\$ 0.4	-	\$ 0.7	-	\$ 0.9	\$ 1.0	\$ 2.3	\$ 1.8	\$ 1.7	-	\$ 8.8
Other	-	\$ 0.5	\$ 0.7	\$ 1.7	\$ 4.1	\$ 1.5	\$ 6.7	\$ 13.8	\$ 12.5	\$ 17.8	\$ 15.8	\$ 6.4	\$ 6.3	\$ 0.6	-	\$ 88.4
Total UPB¹	\$ 2.1	\$ 6.4	\$ 13.7	\$ 21.2	\$ 28.0	\$ 21.3	\$ 35.6	\$ 47.3	\$ 56.7	\$ 61.6	\$ 61.5	\$ 61.8	\$ 63.5	\$ 46.5	\$ 6.1	\$ 533.5

K-Deal Program © Freddie Mac Multifamily ¹ Includes Value-Add (K-100) Deal in which Freddie Mac is not the mortgage loan seller

K-Deal Securitization Volume (Continued)

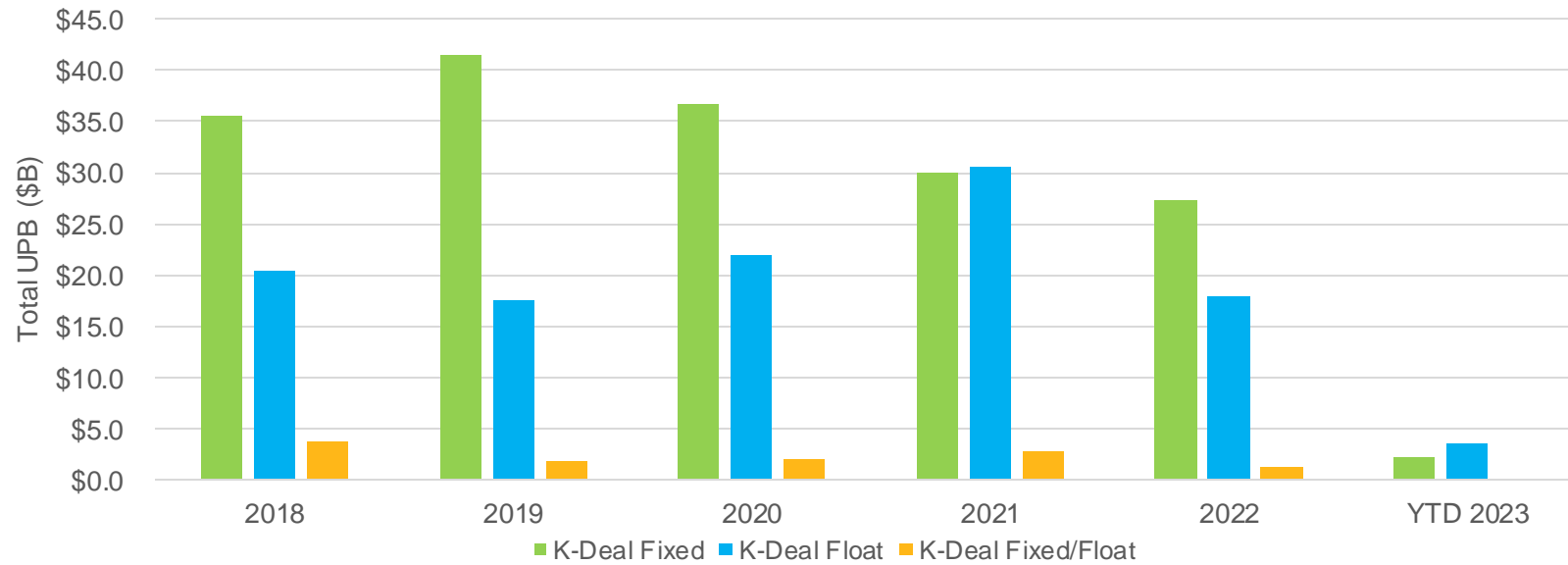
Execution by Deal Type (2009 - 1Q2023)



¹Includes Value-Add (K-100) deal type in which Freddie Mac is not the mortgage loan seller

Securitized Collateral UPB for On-The-Run Deals

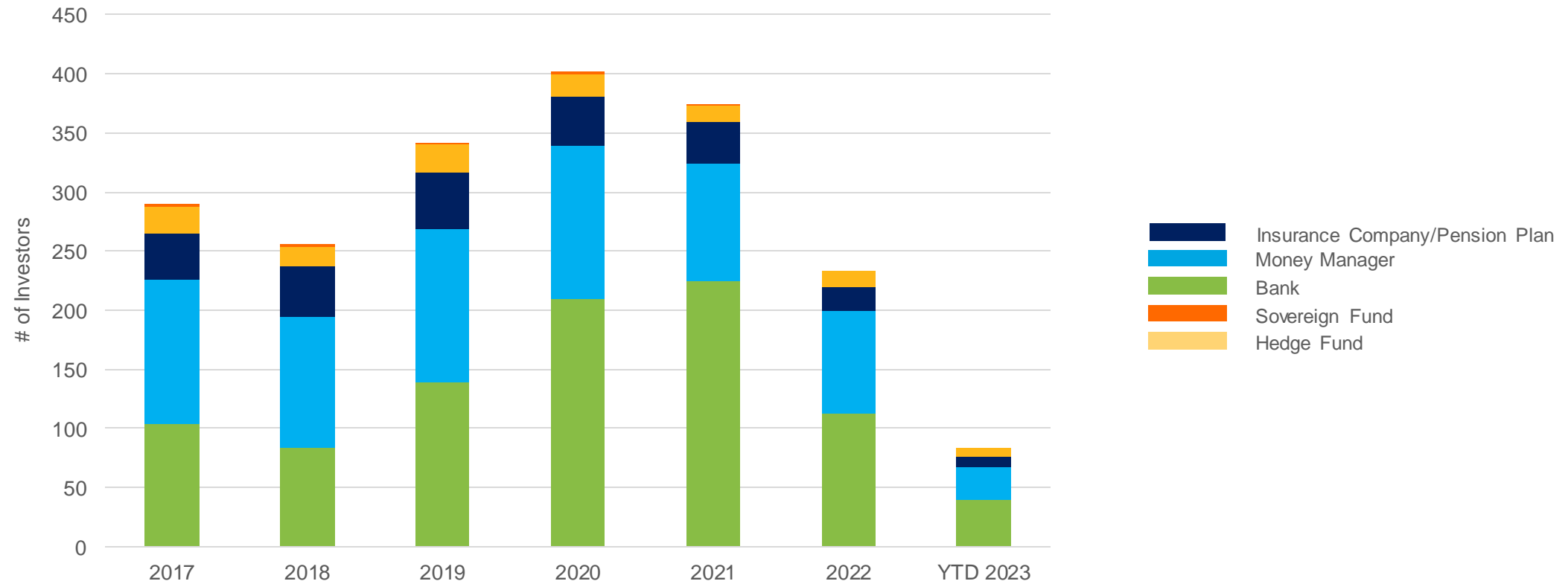
Below is a breakout of fixed- and floating-rate K-Deal collateral unpaid principal balance (UPB) that has been securitized since 2018



Year	2018	2019	2020	2021	2022	YTD 2023
K-Deal Fixed	\$35.7	\$41.5	\$36.8	\$30.1	\$27.4	\$2.3
K-Deal Float	\$20.5	\$17.6	\$21.9	\$30.6	\$17.9	\$3.5
K-Deal Fixed/Float	\$3.8	\$1.9	\$2.1	\$2.9	\$1.2	\$0.0
Total	\$59.9	\$61.0	\$60.8	\$63.5	\$46.5	\$5.9

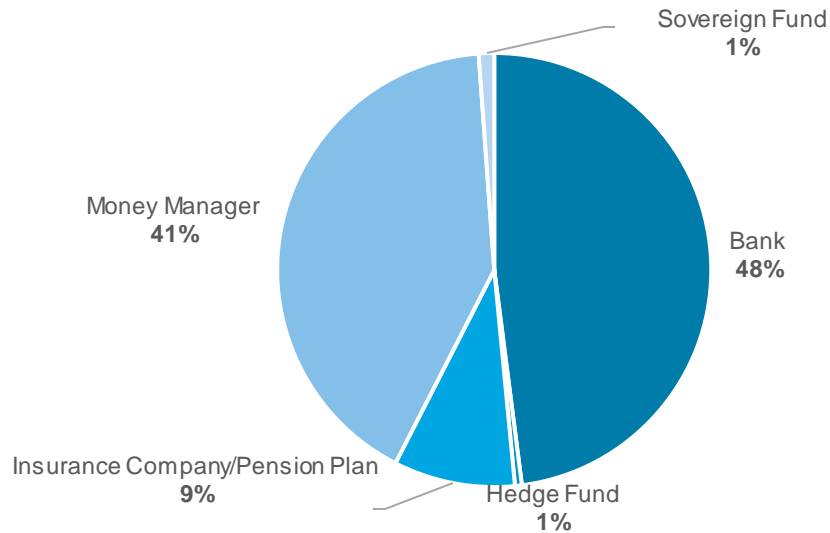
Historical Investor Participation

Investor participation in the K-Deal program remains active as our consistent issuance provides ample liquidity to the market



Historical Investor Types¹

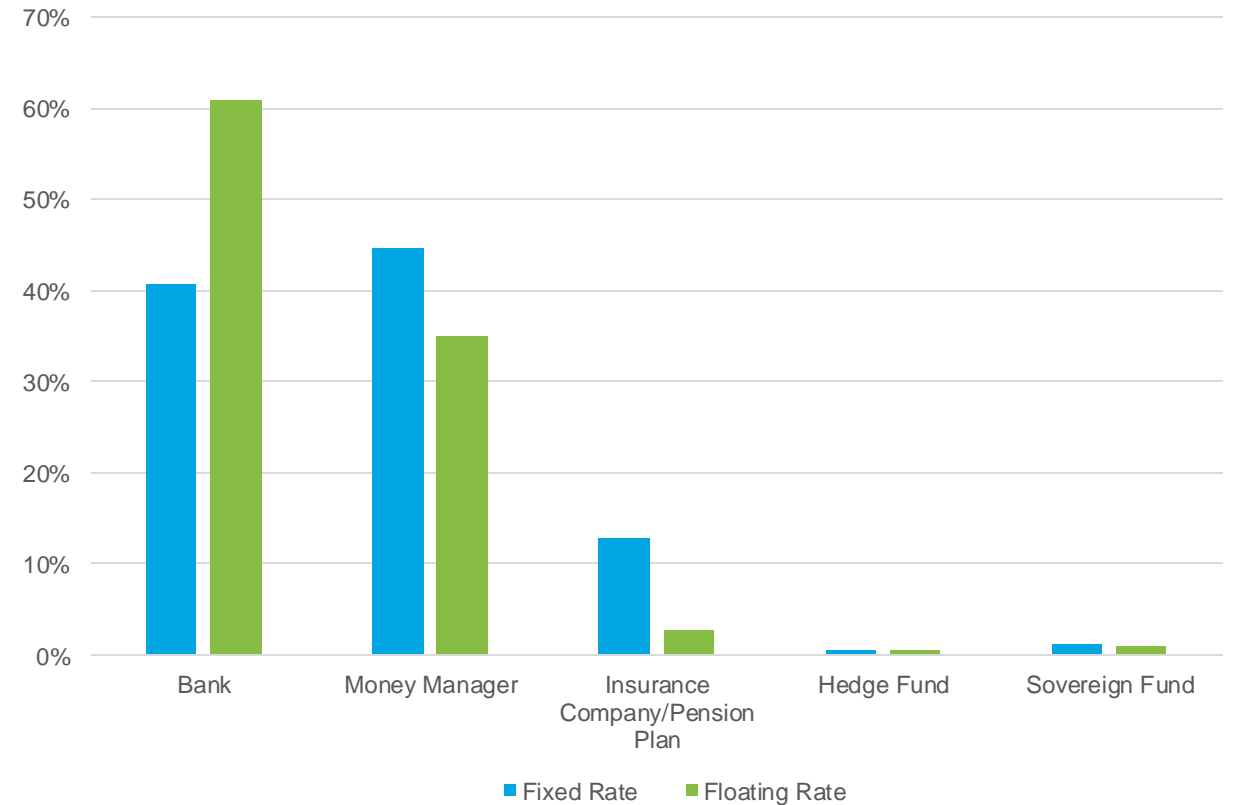
K-Deal Investors by Type



Since the K-Deal program's inception in 2009, the investor base has grown significantly:

- 950 investors historically, with 83 participating in Q1 2023
- Average of 35 different accounts per transaction historically, with 22 per transaction in Q1 2023
- 58 subordinate investors historically, with 5 participating in Q1 2023

Fixed- vs. Floating-Rate Investors



¹ Data reflects senior bond allocations for all deals closed in the life of the program

K-Deals Performance

Freddie Mac is an active and consistent issuer of top-quality multifamily securities, featuring transparency and consistency on collateral and deal information

As of March 2023, the K-Deal program has grown to include

- 517 K-Deal transactions
- \$530.32 billion in combined issuance
- 25,267 loans (original loan counts)
- 99.85% of the K-Deal loans are current
- 76 loans are assigned to special servicing (representing <20 bps of outstanding principal)
- There have been \$55.16 in total realized losses (representing approximately <2 bps of total issuance)
- Freddie Mac has not realized any credit losses on our K-Deal guarantees¹
- 10,669 loans have paid off on or prior to maturity date (38.63% of combined issuance, by loan balance)
- 7.06% of the outstanding loan population (by outstanding principal) is on the servicers' watchlist²

¹ There has been \$55.16 million in total losses realized by B-piece investors (representing <1 bp of total issuance)

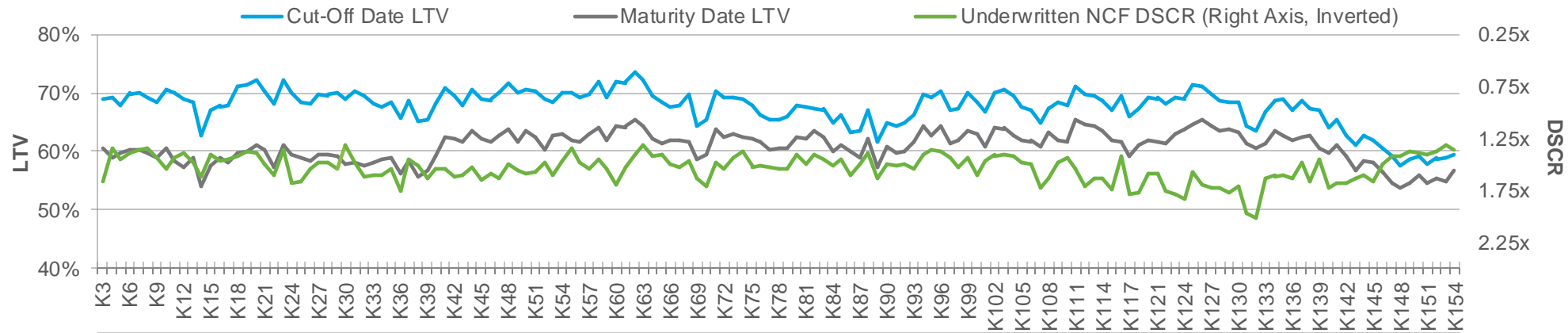
² The respective Master Servicers maintain a watchlist for each securitization. Loans are added to and removed from the watchlist in accordance with criteria established by CREFC

K-Deal Snapshot

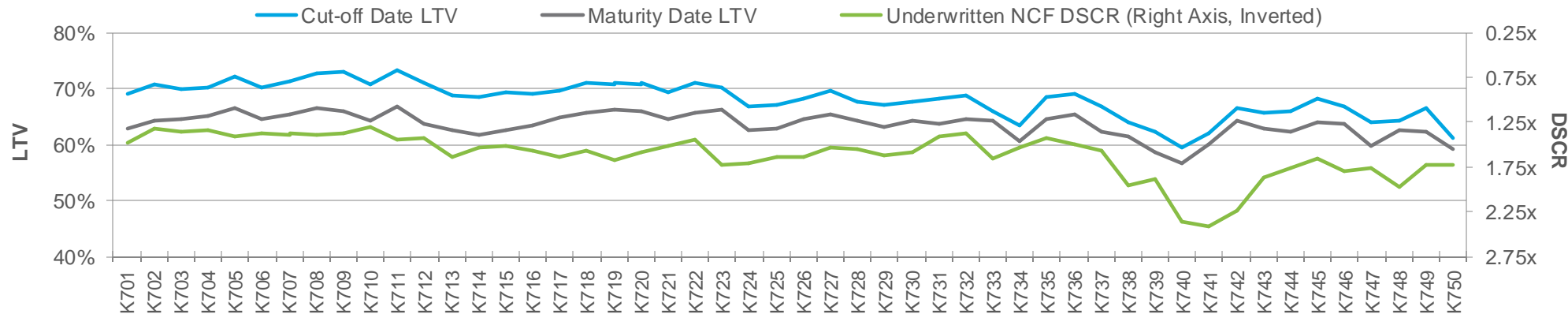
# of Deals	Deal Name	Closing Date	# of Loans	Closing Balance (\$ Millions)	Guaranteed Balance (\$ Millions)	Average Loan Cutoff Principal Balance (\$ Millions)	Coupon	Remaining Loan Term (Months)	Seasoning (Months)	Loan to Value %	Debt Service Coverage Ratio	Loan Balance % Top 10	Acquisition Loans %
2	2009 Deals	2009	108	2,140.00	1,979.50	19.8	5.707	115	4	69.0	1.51	54.4	28.8
6	2010 Deals	2010	364	6,443.71	5,693.79	17.7	5.547	113	4	69.0	1.38	46.2	24.9
12	2011 Deals	2011	839	13,658.17	11,722.21	16.3	4.901	102	5	68.5	1.43	38.7	30.0
17	2012 Deals	2012	1141	21,203.76	17,922.33	18.6	4.081	92	6	70.3	1.45	37.3	39.3
19	2013 Deals	2013	1391	28,036.11	23,696.30	20.2	3.625	104	6	68.5	1.56	36.3	45.6
17	2014 Deals	2014	1299	21,324.93	18,262.56	16.4	3.678	92	5	68.5	1.68	34.4	47.2
30	2015 Deals	2015	1858	35,621.53	30,552.87	19.2	3.381	100	7	70.1	1.63	45.7	48.7
48	2016 Deals	2016	2643	47,289.04	41,553.83	17.9	3.341	96	7	70.6	1.54	48.6	52.1
55	2017 Deals	2017	2623	56,721.94	50,079.20	22.7	3.309	103	6	68.4	1.53	49.6	49.3
60	2018 Deals	2018	2843	59,921.07	52,843.98	21.1	3.536	105	4	68.0	1.46	52.0	43.8
65	2019 Deals	2019	2559	61,541.58	54,099.19	37.8	3.499	109	4	67.8	1.43	55.3	47.1
63	2020 Deals	2020	2742	61,814.08	56,465.82	32.7	2.996	113	4	67.0	1.60	54.5	36.0
67	2021 Deals	2021	2737	63,540.75	59,491.19	26.8	2.769	110	3	69.0	1.61	56.4	51.1
52	2022 Deals	2022	2007	46,465.50	43,138.37	27.3	3.112	105	2	61.7	1.43	55.1	38.7
7	2023 Deals	3/29/2023	278	6,149.54	11,514.72	25.2	3.462	116	2	58.1	1.20	57.6	38.4
7	2023 Q1	3/29/2023	278	6,149.54	11,514.72	25.2	3.462	116	2	58.1	1.20	57.6	38.4

Credit Metrics – Fixed-Rate K-Deals

10-Year Fixed K-Deals

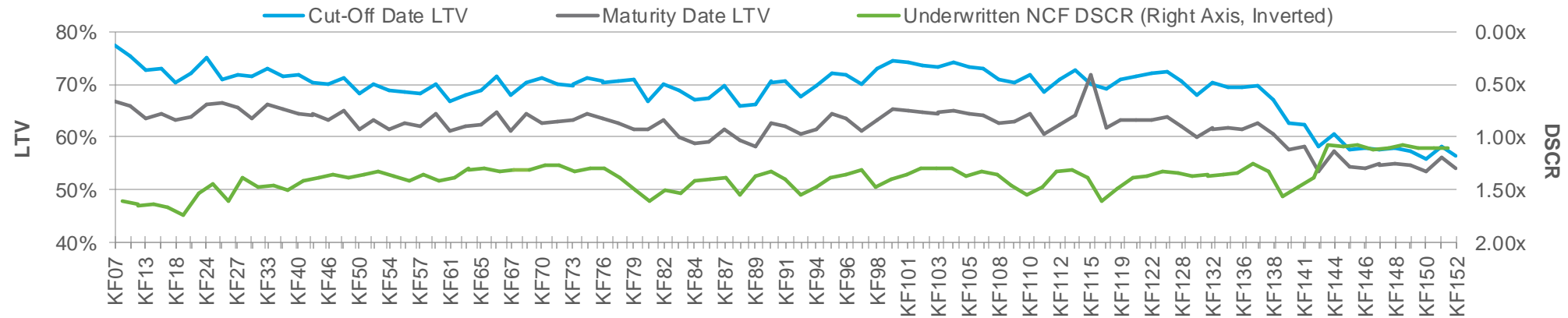


7-Year Fixed K-Deals

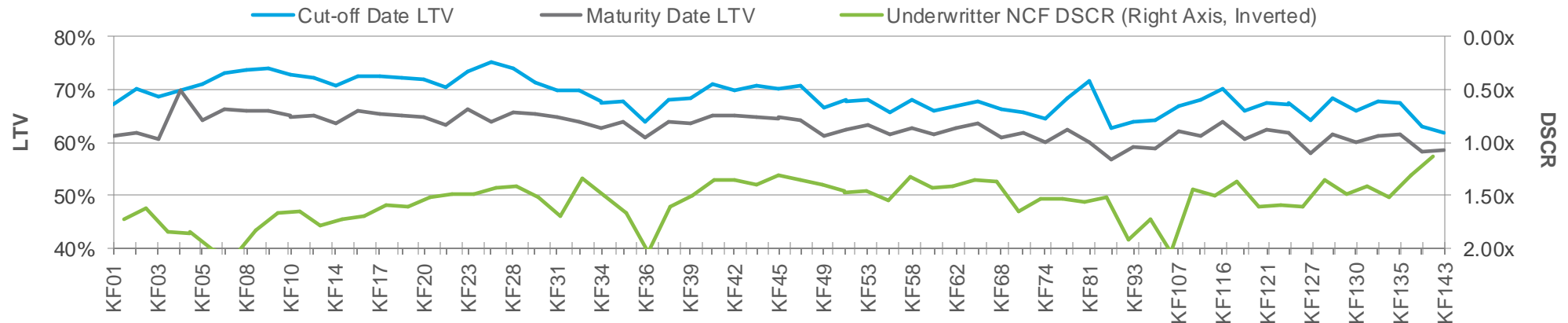


Credit Metrics – Floating-Rate K-Deals

10-Year Floating K-Deals



7-Year Floating K-Deals



Stay up to Date with Our Investor Resources

- K-Deal Program Handout – <https://mf.freddiemac.com/docs/k-deal-handout.pdf>
- K-Deal Fully Guaranteed (Rated) Handout – <https://mf.freddiemac.com/docs/k-deal-100-guaranteed-rated-handout.pdf>
- K-Deal A-M Class Handout – https://mf.freddiemac.com/docs/k_deal_a_m_class_highlights.pdf
- K-Deal SOFR Bonds Overview – https://mf.freddiemac.com/docs/k_deal_sofr_bonds.pdf
- K-Deal Performance Data – https://mf.freddiemac.com/docs/k_deal_performance_presentation.pdf
- Floating- and Fixed-Rate Loan Prepayment Report – <https://mf.freddiemac.com/docs/20221128-floating-fixed-rate-prepayment-report.pdf>
- Multifamily Issuance Calendar – https://mf.freddiemac.com/docs/mf_issuance_calendar.pdf
- Multifamily Securities Pricing – <https://mf.freddiemac.com/investors/multifamily-securities-pricing>



Multifamily Certificates
Q2 2023 Announcement Calendar

Deal Name	Announcement Week of	Freddie Mac Program	Collateral Rate Type	Contracted Loan Term	Projected Issuance Size (\$ millions)	Prepayment Rate (\$ millions)
K-245	May 15, 2023	Supplemental	Fixed	Various	348	N/A
M-15	May 8, 2023	Tax-Exempt	Fixed	Various	425	N/A
K-F156	May 1, 2023	Conventional	Floating	10-year	935	N/A
K-751	May 1, 2023	Conventional	Fixed	7-year	907	N/A
K-156	April 24, 2023	Conventional	Fixed	10-year	1,044	N/A
K-F155	April 24, 2023	Conventional	Floating	7-year	931	N/A
K-155	April 17, 2023	Conventional	Fixed	10-year	1,270	800**
K-F154	April 10, 2023	Conventional	Floating	10-year	996	N/A
K-F153	April 3, 2023	Conventional	Floating	10-year	924	N/A



For additional information, please contact: MF_CM_InvestorRelations@freddiemac.com or visit our website at mf.freddiemac.com


Loan Performance Resources

Performance data for our K-Deals is updated monthly at <https://mf.freddiemac.com/investors/data.html>

K-Deal® Performance

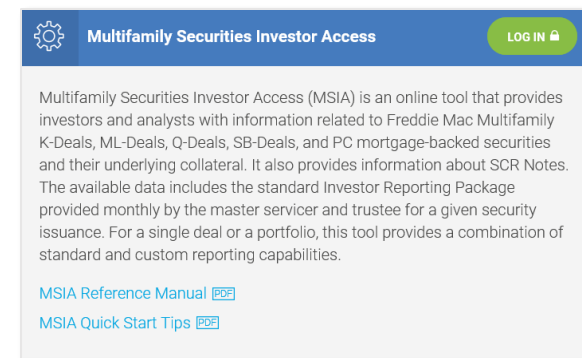
Performance through March 2023

COMBINED ISSUANCE	DEALS	LOANS	PAID OFF LOANS
\$530.32 B	517	25,267 original loan count	10,669
DELINQUENCY STATUS	AGGREGATE LOSSES	LOANS IN SPECIAL SERVICING	UNPAID BALANCE ON WATCHLIST*
0.15%	\$55.16 M	76	7.06%

 View the K-Deal Performance Presentation [PDF](#)

*The respective master servicers maintain a watchlist for each securitization. Loans are added to and removed from the watchlist in accordance with criteria established by CREFC.

Loan-level performance can be accessed in our [Multifamily Securities Investor Access](#) tool



Multifamily Securities Investor Access (MSIA) is an online tool that provides investors and analysts with information related to Freddie Mac Multifamily K-Deals, ML-Deals, Q-Deals, SB-Deals, and PC mortgage-backed securities and their underlying collateral. It also provides information about SCR Notes. The available data includes the standard Investor Reporting Package provided monthly by the master servicer and trustee for a given security issuance. For a single deal or a portfolio, this tool provides a combination of standard and custom reporting capabilities.

[MSIA Reference Manual PDF](#)
[MSIA Quick Start Tips PDF](#)

Historical information about our Whole Loan Portfolio is available in the [Multifamily Loan Performance Database](#)

Multifamily Loan Performance Database

This database provides historical information on a subset of the Freddie Mac Multifamily whole loan portfolio since 1994. It also includes information on original loan terms; identifiers for prepaid loans, defaulted loans and delinquencies; property information; and dates of real estate owned (REO) sales.

If you want to use the data for commercial redistribution, please follow the instructions in the Licensing Agreement for Using the Multifamily Loan Performance Database below.

[Overview and Data Dictionary PDF](#)
[Loan Performance Dataset PDF](#)
[Dataset Loss Summary PDF](#)
[Licensing Agreement for Using the Multifamily Loan Performance Database PDF](#)

Bloomberg Naming Conventions

Deal Type	Descriptor	Bloomberg SPC
10-Year	K-000	K-001 to K-149 : FHMS K###, K-150 onward : FHMS K-###
Floating Rate	K-F00	K-F001 to K-F099 : FHMS KF##, K-F100 to K-F122 : FHMS K-F###, K-F123 onward : FHMS KF###
7-Year	K-700	FHMS K7##
Single Sponsor	K-ABC	FHMS KABC
+10-Year	K-1500	K-1501 to K-1509 : FHMS K15#, K-1510 to K-1521 : FHMS K-15##, K-1522 : FHMS K1522
Senior Housing	K-S00	FHMS KS##, KS08 : S8FL/S8FX
Supplemental	K-J00	FHMS KJ##, KJ15/KJ19/KJ22 : FHMS J##F/J##L
Workforce	K-W00	FHMS KW##
Callable	K-C00	FHMS KC##
Large Loan	K-L00	K-L01 to K-L04 : FHMS KL#, K-L05 onward : FHMS KL0#
No-Subordination	K-P00	FHMS KP0#
5-Year	K-500	FHMS K50#
Value-Add	K-I00	FHMS KI0#
Seasoned	K-X00	FHMS KX0#, KX02/KX03 : X#FX/X#FL
Lease Up	K-LU0	FHMS KLU#
Green	K-G00	FHMS KG##
Sustainability	K-SG0	FHMS KSG#

View our [Security Lookup](#) tool to search for disclosure data and documents

K-154 Transaction Highlights

Overview of Deal Structure (Pricing Date: March 21, 2023)

Class	Initial Principal or Notional Amount	Pricing Spread	Assumed Weighted Average Life
Offered K-154 Certificates:			
A-1	\$43,854,000	P+110	6.99
WI A-2	\$650,000,000	P+88	10.24
A-2	\$289,884,000	P+110	9.76
WI A-M	\$150,000,000	P+93	10.24
X1	\$983,738,000	T+205	9.40
XAM	\$150,000,000	Auctioned	9.57
X3	\$59,671,671	T+525	9.64
Total Guaranteed	\$1,133,738,000		

Deal Characteristics¹

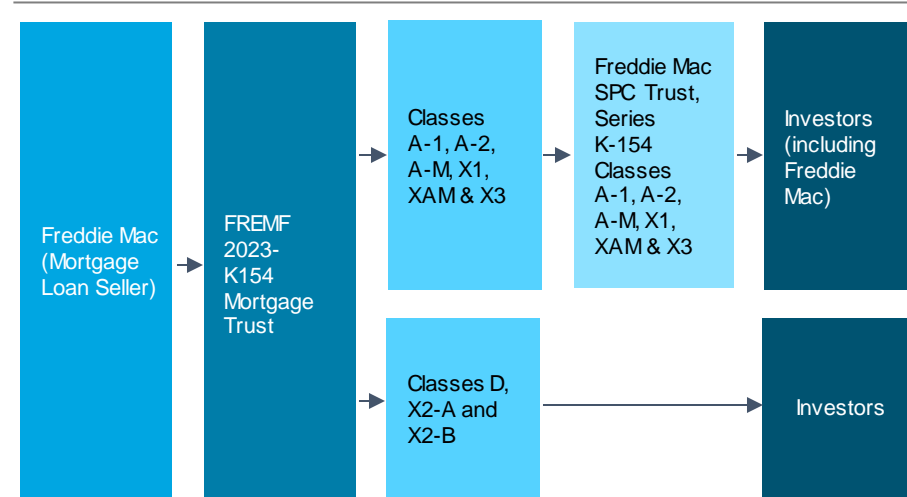
Collateral Type	Multifamily 10-Year Fixed
Collateral Structure Type	Balloon
Mortgage Loans	50
Initial Underlying Pool Balance	\$1,193,409,671
Rating Agencies	Fitch/KBRA
Waterfall Structure	Sequential
Top 5 State Concentrations	TX (16.1%), CA (13.9%), FL (9.7%), MI (9.6%), NC (7.7%)
WA Mortgage Interest Rate	5.340%
WA Original Maturity	117 months
WA DSCR	1.36x
WA LTV	59.5%

¹ As of the Cut-off Date

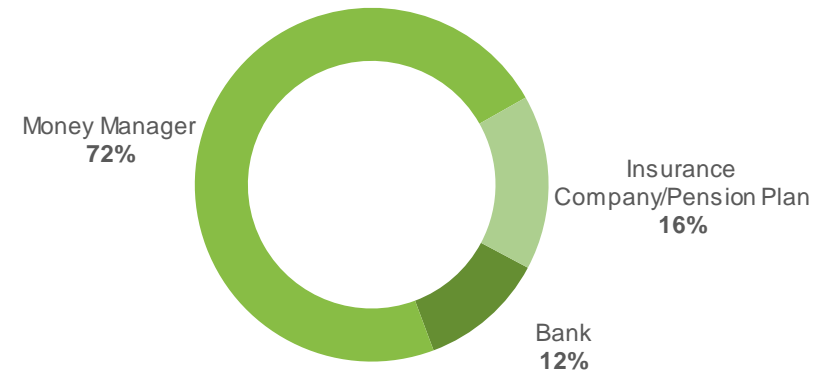
² Majority of the A-2 and A-M class are sold through the WI- program. Visit our [When-Issued webpage](#) for additional resource on the program

³ As of the Closing Date

Structural Diagram



Breakdown of Investors (Classes A-1, A-2 and A-M)³



K-F152 Transaction Highlights

Overview of Deal Structure (Pricing Date: February 28, 2023)

Class	Initial Principal or Notional Amount	Pricing Spread	Assumed Weighted Average Life
Offered K-F152 Certificates:			
AS	\$699,241,000	S+50	9.76
XS	\$68,721,545	Non-Offered	9.76
Total Guaranteed	\$699,241,000		

Deal Characteristics¹

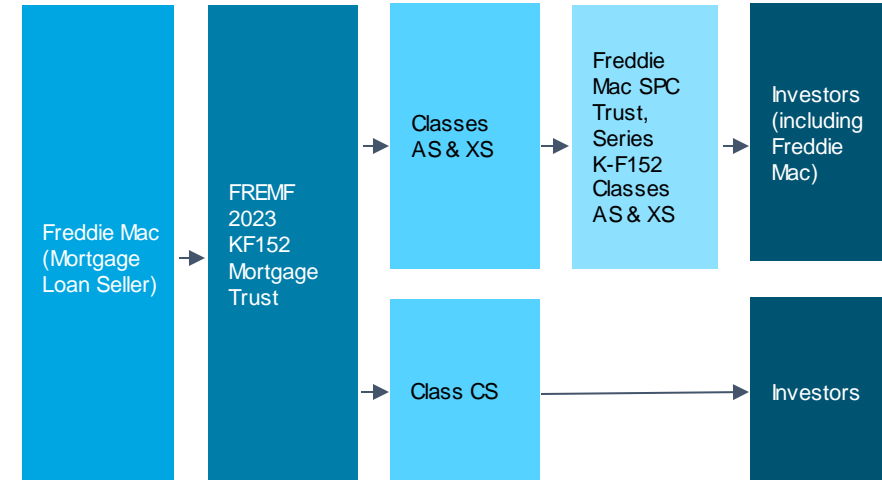
Collateral Type	Multifamily Floating-Rate Mortgage Loans
Collateral Structure Type	Balloon
Mortgage Loans	31
Initial Underlying Pool Balance	\$755,937,000
Rating Agencies	Not Rated
Waterfall Structure	Pro Rata
Top 5 State Concentrations	TX (25.4%), GA (18.0%), AZ (15.7%), NC (14.8%), FL (11.0%)
WA Original Maturity	120 months
WA DSCR	1.11x
WA LTV	56.3%

¹ As of the Cut-off Date

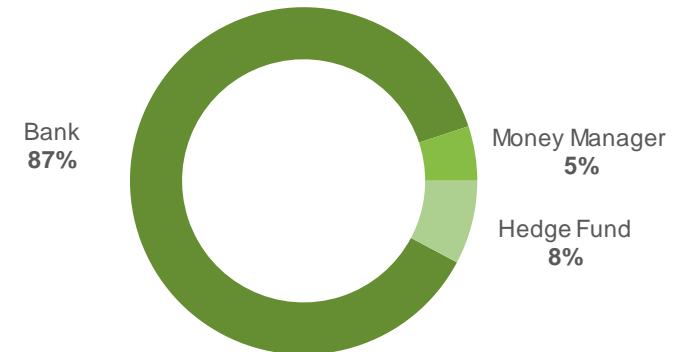
² As of the Closing Date

Note: Floating-rate K-Deals now include one bond class indexed to SOFR

Structural Diagram



Breakdown of Investors (Classes AS)²



K-J44 Transaction Highlights

Overview of Deal Structure (Pricing Date: February 15, 2023)

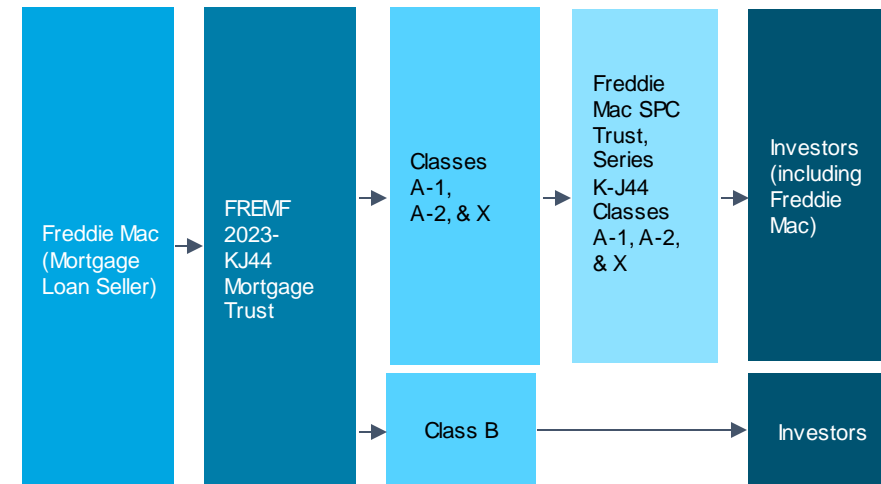
Class	Initial Principal or Notional Amount	Pricing Spread	Assumed Weighted Average Life
Offered K-J44 Certificates:			
A-1	\$48,250,000	P+65	4.77
A-2	\$198,265,000	P+101	7.75
X	\$58,003,568	Non-Offered	6.64
Total Guaranteed	\$246,515,000		

Deal Characteristics¹

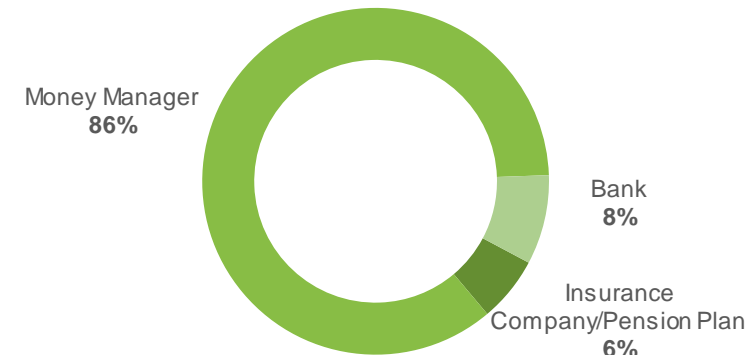
Collateral Type	Multifamily Supplemental Mortgage Loans
Collateral Structure Type	Balloon
Mortgage Loans	51
Initial Underlying Pool Balance	\$290,017,841
Rating Agencies	Not Rated
Waterfall Structure	Pro Rata
Top 5 State Concentrations	OH (13.8%), NY (12.7%), GA (7.7%), TX (7.5%), OR (7.3%)
WA Mortgage Interest Rate	7.045%
WA Original Maturity	90 months
WA DSCR	1.36x
WA LTV	61.8%

¹ As of the Cut-off Date
² As of the Closing Date

Structural Diagram



Breakdown of Investors (Classes A-1 and A-2)²



K-SG4 Transaction Highlights

Overview of Deal Structure (Pricing Date: September 14, 2022)

Class	Initial Principal or Notional Amount	Pricing Spread	Assumed Weighted Average Life
Offered K-SG4 Certificates:			
A-1	\$35,500,000	P+85	6.99
A-2	\$553,916,000	P+91	9.73
X1	\$589,416,000	Auctioned	9.56
Total Guaranteed	\$589,416,000		

Deal Characteristics¹

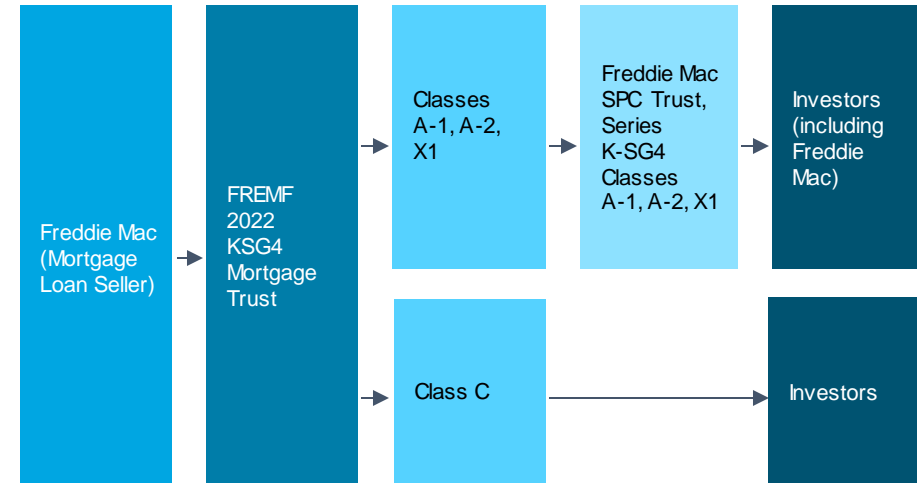
Collateral Type	Multifamily Fixed-Rate Mortgage Loans
Impact Designation	Sustainability
Collateral Structure Type	Balloon
Mortgage Loans	33
Initial Underlying Pool Balance	\$620,438,251
Rating Agencies	Not Rated
Waterfall Structure	Sequential
Top 5 State Concentrations	MD (22.2%), NJ (10.1%), VA (9.3%), TN (6.4%), CA (6.1%)
WA Original Maturity	120 months
WA DSCR	1.45x
WA LTV	62.1%

¹ As of the Cut-off Date

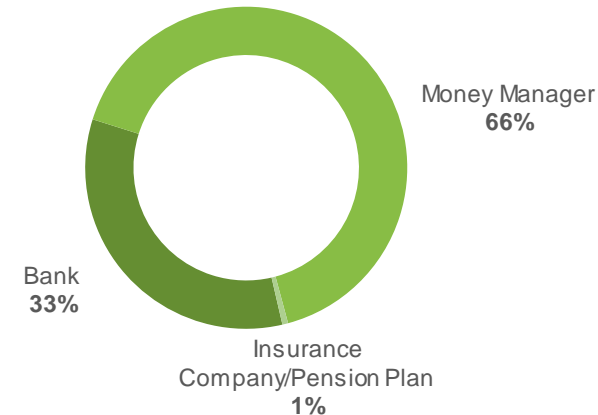
² As of the Closing Date

Visit our [website](#) for our other impact bond offerings and their execution path

Structural Diagram



Breakdown of Investors (Classes A-1, A-2)²



This product overview may contain forward-looking statements. 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 several assumptions, judgments and estimates, and various factors could cause actual results to differ materially from the expectations expressed in these and other forward-looking statements. These assumptions, judgments, estimates and factors are discussed in the company's most recent Annual Report on Form 10-K, and its reports on Form 10-Q and Form 8-K, which are available on the Investor Relations page of the company's website at <http://www.freddiemac.com/investors> and the SEC's website at 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.

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